



VSDC Video Editor Help

User Manual

Version 11.10.23

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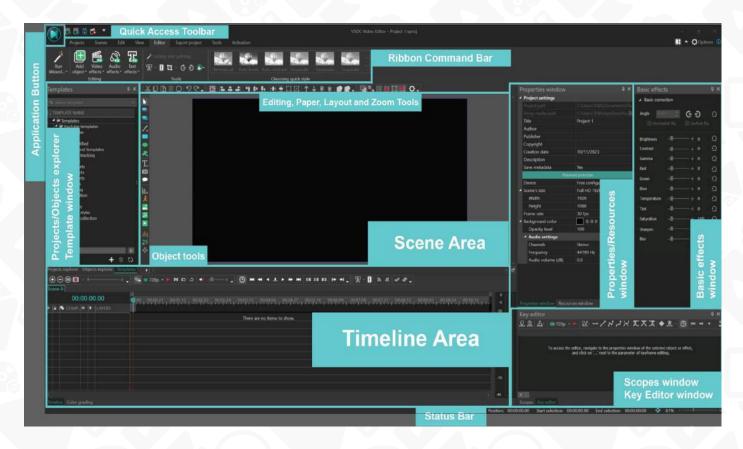


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Main window

The **Main Window** of the **VSDC Video Editor** comprises various elements, such as areas, buttons and toolbars, which help perform various editing operations and can be customized according to your needs. The following picture shows you the default program interface.



Application Button offers you a drop down menu containing the essential options of the program.

Quick Access Toolbar allows you to quickly access frequently used options of the program. You can easily add additional buttons to this toolbar. Right click any button on the Ribbon Command Bar and select the "Add to Quick Access Toolbar" option.

Ribbon Command Bar is a bar located at the top of the **VSDC Video Editor**. It includes the following tabs: Projects, Scenes, Edit, View, Editor, Export project, Tools, Activation. Each tab contains appropriate command buttons organized in button groups. You can hide the command buttons, so that only tabs will be shown, clicking the "Minimize the Ribbon" arrow at the right upper corner of the main window.

Panes manager is a menu that allows you to select a workspace configuration. There are 5 options available:



- Classic: The standard default configuration.
- Compact: Designed for those working on low-resolution PCs.
- Color: Focused on details and color correction.
- Parameters: Configured to display panels containing object and effects parameters such as the Properties window, Key editor, and Objects explorer.
- Timeline: Ideal for working with a large number of files.
- Libraries: Customized for managing and working with a substantial volume of files.
- Adobe Premiere: Tailored for users transitioning from Adobe software.
- DaVinci Resolve: Adapted for users migrating from DaVinci Resolve.

If you want to customize your workspace, select Configuration from the menu to choose the settings you prefer and apply hotkey combinations.

Projects/Objects explorer gets you access to all the opened projects and scenes within each project or added objects of each scene. If you don't use this area while editing, you can close or hide it.

Template window contains a library that allows for easy navigation among existing effects and saving new custom templates.

Scene Area allows you to preview your video while editing and to change the objects' size and position.

Timeline Area helps you manage your video, image and audio data, as well as added effects and objects. You can change the timeline scale to achieve the necessary precision using the "Increase/Decrease" buttons or moving the corresponding slider.

Color Grading is a panel located in the timeline area. It contains all the basic color grading controls, allowing you to perform a full cycle of color grading in one place.

Objects Tools situated at the left side of the **Scene area** contains useful buttons helping you add media files and objects. You can locate this toolbar at the top of the **Scene area** or any other place of the main window as an independent bar.

Editing Tools, Paper Tools, Layout Tools and **Zoom Tools** at the top of the **Scene area** comprise various buttons intended to make various editing operations. You can close them or change the location of each toolbar.

Properties/Resources window situated at the right of the **Scene area** shows all the available properties of the selected media file or added object, as well as all resources structured by their type. If you don't use this area while editing, you can close or hide it. **Scopes window** displays the analysis of the RGB channel components for the currently



viewed image or video. There are 3 analysis modes to choose from: RGB, Parade and Wave. We talk about them in detail in "Scopes window".

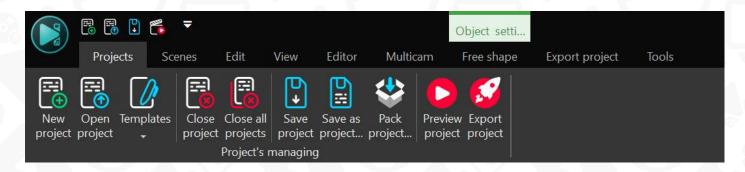
Key Editor window enables to configure effect and object parameters based on keyframes.

Status Bar is an information area located at the bottom of the main window. It shows you the cursor position value, the beginning and the end of the selected area and it repeats the commands of the **Zoom tools** toolbar.

You can customize the size of such areas as **Projects/Objects explorer, Template** window, Scene area, Timeline area, Color Grading panel, Properties/Resources/Scopes window, Key Editor window so that they are more comfortable for using. To do that, place the mouse cursor at a gray boundary of the area, it turns to a double arrow with vertical strokes, hold the left mouse button and move the boundary to increase/decrease the area's size.

Ribbon Command Bar

Ribbon command bar of **VSDC Video Editor** comprises the following tabs and buttons:





Projects Tab

Button group	Button	Icon	Description
Project's managing	New project		Use it to start a new project, set main parameters and add new media content.
	Open project		Use it to open a previously saved project and edit it.
	Edit templates		Use it to open user's template and edit it.
	Close project		Use it to close the currently opened project and go back to the overview page.
Save a Save a project	Close all projects		Use it to close all opened projects and go back to the overview page.
	Save project	€ •	Use it to save the currently edited project.
	Save as project	िस	Use it to save the currently edited project under a different name.
	Pack project	*	Use it to save the currently edited project with input resources for work on another computer.
	Preview project		Use it to open the preview window and see the result of your editing operations.
	Export project	3	Use it to open the Export project tab and select an appropriate video format to save your project.

Scenes Tab

Button	Button	Icon	Description
group			
Scene's managing	New scene	E	Use it to add a new scene to your current project.
	Load scene		Use it to open a previously saved scene from your computer.
	Save as scene	<u>61</u>	Use it to save the current scene in the computer's hard disc or in other storage devices.



	Remove scene	8	Use it to delete the currently edited scene.
	Remove all scenes		Use it to delete all the scenes you are working at in the project.
	Move up	↑	Use them to change the scene order in the current
	Move down	\downarrow	project.
	Preview scene		Use it to open the preview window and see the result of your editing operations on the selected scene.
	Pack scene	***	Use it to save the current scene with input resources for work on multiple devices.

Edit Tab

Button group	Button	Icon	Description
Editing tools	Cut	8	Use it to remove the selected object from the scene with a view to paste it to another scene.
	Сору		Use it to copy the selected object with a view to paste it to another place of the scene.
	Paste		Use to paste the object you have previously cut or copied.
	Delete		Use it to remove the selected object from the scene.
	Select all	0	Use it to select all the available objects on the scene.
	Undo	5	Use it to reverse the last command, such as cutting, pasting or deletion, etc. If this button is not available, it means there is no action to undo.
	Redo	(7	Use it to repeat your latest undone command.
Layout tools	Alignment mode	ا	Use it to align selected objects according to each other or by the parent object's position.



	Left align	-	Use it to locate the selected object on the left side of the screen.
	Right align		Use it to locate the selected object on the right side of the screen.
	Top align	•1	Use it to locate the selected object on the top of the screen.
	Bottom align	<u>l.</u>	Use it to locate the selected object on the bottom of the screen.
	Horizontal align center	4	Use it to locate the selected object at the horizontal center of the screen.
	Vertical align center	••	Use it to locate the selected object at the vertical center of the screen.
	Same width	•• •	Use it to increase the width of the selected object by the scene screen
	Same height	•	Use it to increase the height of the selected object by the scene screen
	Make same size		Use it to increase/decrease the selected object so that it occupies the same size as the scene screen.
	Make same size and position		Use it to increase/decrease the selected object so that it occupies the same size and the same position as the scene screen
	Up	↑	Use it to move the selected object up.
	Down	\downarrow	Use it to move the selected object down.
	To front		Use it to move the seated object to font.
	To bottom	*	Use it to move the seated object to bottom.
	Group objects		Use it to group several objects selected on the screen.
	Ungroup objects		Use it to ungroup several objects selected on the screen.



View Tab

Button group	Button	Icon	Description
Windows forms	Projects explorer	200	Use it to show/hide the Project explorer area on the left of the main window.
	Objects explorer		Use it to show/hide the Objects explorer area on the left of the main window.
	Properties window	- - - -	Use it to show/hide the Properties window on the right of the main window.
	Resources window		Use it to show/hide the Resources window on the right of the main window.
	Timeline window	<u></u>	Use it to show/hide the Timeline window at the bottom of the main window.
	Basic effects	fx	Use it to show/hide the Basic effects window on the right of the main window.
	Color Grading	00	Use it to show/hide the Color Grading panel at the bottom of the main window.
	Scopes window	6	Use it to show/hide the Scopes window at the bottom right corner.
	Template window		Use it to show/hide the Template window on the left of the main window.
	Template preview	lacksquare	Use it to show/hide the Template preview window next to the Template window.
	Source window		Use it to show/hide the Source window on the left side of the scene area.
Scene toolbars	Objects tools	₽	Use it to show/hide the Objects tools toolbar in the left of the scene area.
	Editing tools	0	Use it to show/hide the Editing tools toolbar at the top of the scene area.
	Paper tools	<u></u>	Use it to show/hide the Paper tools toolbar at the top of the scene area.
	Layout tools		Use it to show/hide the Layout tools toolbar at the top of the scene area.
	Zoom tools	Q	Use it to show/hide the Zoom tools toolbar at the top of the scene area.



Timeline toolbars	Zoom tools		Use it to show/hide the Zoom settings toolbar above the timeline
	Playback tools	The second second second	Use it to show/hide the Zoom settings toolbar above the timeline.

Editor Tab

Button group	Button	Icon	Description
Editing	Run Wizard	Ž	Use it to open the File's sequence wizard window that helps load images and create slideshows.
	Add object		Use it to add a new object to the scene, such as a text, a rectangle, an audio file, etc.
	Video effects		Use it to select and apply a video effect to your video or image file.
	Audio effects	\$3	Use it to select and apply an audio effect to your audio file.
	Text effects	77	Use it to select and apply a text effect to your text file.
Tools	Cutting and splitting	Ž	Use it to open an additional Video editor window that helps delete unnecessary scenes from your video or split it into parts.
	Cut out fragment	*	Use it to cut out the selected fragment of your video
	Split into parts	H	Use it to split the video file into two fragments by the current cursor position.
	Crop borders	ಠ	Use it to crop border of your video file. You can use the Auto cropping option or specify custom parameters.
	Rotate 90 degrees	C	Use it to rotate your video file to 90 degrees clockwise.
	Rotate -90 degrees	•	Use it to rotate your video file to 90 degrees counterclockwise.
	More tools	©	Use it to change the Opacity setting of your video, to Convert to sprite or to Take a snapshot .
Choosing style		×	This group button changes according to the selected object on the scene. It helps apply various styles to the selected object.



Free shape Tab

Button group	Button	Icon	Description
Free shape settings	Insert point	M	Use it to add more points to the existing shape.
	Show rect		Use this to show or hide the boundaries of a free shape.
	Show paths		Use it to show the path between points.
	Clip the borders		Use it to clip the shape in accordance with the original rectangle borders.
	Number of points (for curve approximation)	::	Use it to make the shape smoother.
Shape point settings	Path's start point	•	Use it to indicate the selected point as the start point.
	Shape's start point		Use it to start a new shape from the current point.
	Shape orientation		Use it to cut out the inverted area of multiple shapes.
	Closed free shape		Use it to connect the first and last points and close the shape.
	Path type	D	Use it to change shape's path type.
	Number of points (from previous path)		Use it to make shape's curve in accordance with the previous points.
	Number of points (from next path)	•	Use it to make shape's curve in accordance with the next points.



Multicam Tab

Button	Button	Icon	Description
group			
Multicam	Split audio and video		Use it to split video and audio content when
manager			switching between camera angles.
	Split video		Use it to split only the video content when
			switching between camera angles.
	Split audio		Use it to split only the audio content when
			switching between camera angles.
	Set angle		Use it to switch between camera angles to set
		Samuel Control of the	its content accordingly on the timeline.
	Settings		Use it to show/hide the audio waveform
			and adjust its visible duration in the Source
			window.

Export project Tab

Button group	Button	lcon	Description
Select media device	PC		Use it to create a video file for playing on your personal computer.
	Web		Use it to create a video file for uploading and playing on various Internet resources.
	iPhone/ iPod	Ć	Use it to create a video file for playing on your Apple devices such as iPhone, iPod, iPad, and iTunes.
	Android		Use it to create a video file for playing on Android devices.
	DVD	Syp.	Use it to create a video file for playing on your DVD player.
	Mobile	101	Use it to create a video file for playing on your mobile devices.
	PS	1	Use it to create a video file for playing on your Play Station.
	Xbox		Use it to create a video file for playing on your Xbox 360.



Select output video format	To AVI	8	Use it to convert your video file to AVI format supported by PC, DVD, Xbox, BlackBerry, Archos, iRiver, Creative Zen, Windows Mobile PPC and Portable Media players.
	To MPG		Use it to convert your video file to MPG format supported by PC, DVD players, Windows Mobile PPC and Portable Media players.
	To MOV	0	Use it to convert your video file to MOV format supported by PC and Portable Media players.
	To WMV	0	Use it to convert your video file to WMV format supported by PC, Xbox, Zune, Archos, iRiver, Creative Zen, Windows Mobile PPC and Portable Media players.
	To MKV	23	Use it to convert your video file to MKV format.
	To MXF		Use it to convert your video file to MXF format.
	To RM	9	Use it to convert your video file to RM format supported by PC, Mobile devices.
	To SWF	F	Use it to convert your video file to SWF format supported by PC, on Web resources.
	To FLV	FLV	Use it to convert your video file to FLV format supported by PC, on Web resources.
	To DVD	0	Use it to convert your video file to DVD format supported by DVD players, Play Station, Xbox.
	To VCD		Use it to convert your video file to VCD format supported by DVD players.
	To M4V		Use it to convert your video file to M4V format supported by Apple devices.

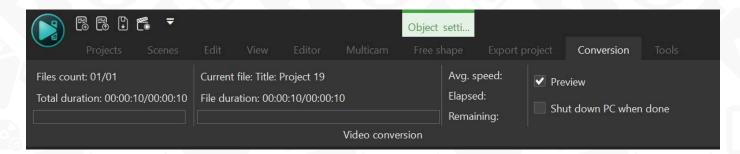


	To MP4	Q	Use it to convert your video file to MP4 format supported on Web resources, by Mobile devices, Xbox, BlackBerry, Zune, MP4 players.
	To WebM	web-m	Use it to convert your video file to WebM format supported on Web resources.
	To GIF		Use it to convert your video file to GIF format supported on Web resources.
	To APNG	A P	Use it to convert your video file to APNG format supported on Web resources.
	To 3GP	3GP	Use it to convert your video file to 3GP format supported by Mobile devices and BlackBerry.
	To 3G2	3G2	Use it to convert your video file to 3G2 format supported by Mobile devices.
	To PSP	Q	Use it to convert your video file to the PSP format supported by Sony PSP handheld and Play Station
	For YouTube	•	Use it to convert your video file to the format acceptable by this video-sharing website.
	For Instagram		Use it to convert your video file to the format suitable for uploading to the popular network.
	For Facebook	f	Use it to convert your video file to the format acceptable by this social networking service.
	For Twitter	7	Use it to convert your video file to the format acceptable by this social networking service.
	For Vimeo	V	Use it to convert your video file to the format acceptable by this video sharing platform.
Video conversion	Set markers	0	Use it to open an additional Video editor window that helps delete unnecessary scenes from your video or split it into parts.
	Export project	3	Use it to start the conversion process so that your project will be exported to the selected video format.



Conversion Tab

This tab allows you to control the conversion process. You can check the **Shut down PC when done** box if you don't want to wait till the end or even stop the conversion if necessary.





Tools Tab

Button group	Button	Icon	Description
Applications	Video stabilization		Use it to launch an additional application that helps turn shaky or jittery footage into a more stable video.
	Video converter		Use it to launch an additional application that helps convert video files to various formats.
	Video capture	•	Use it to launch an additional application that helps capture video from a camera connected to your PC.
	Screen capture	•	Use it to launch an additional application that helps capture video directly from a screen of your computer.
	Voice recorder	₽	Use it to launch an additional application that helps capture audio directly from external devices.
	Disc burner	%	Use it to launch an additional application that helps burn DVD and CD discs.
	YouTube uploader	(A)	Use it to launch an additional application that helps upload your videos directly to this videosharing website.

Activation Tab

This is the last tab on the **Ribbon command bar**, it allows you to get the license key, activate the program to use additional features of the **Pro version**. It provides you the link to the official site of the program's developers, it helps you get a technical support and check for updates.

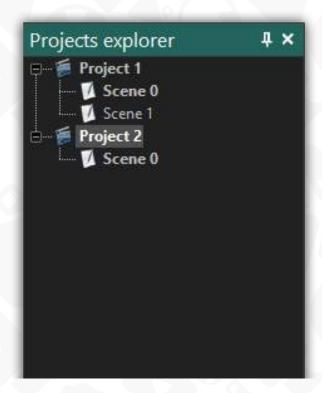


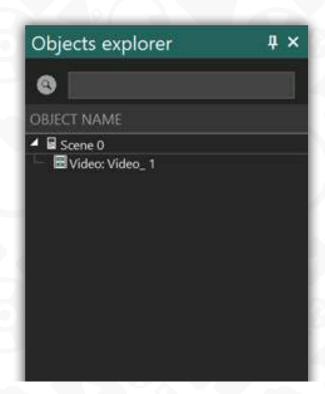
Button group	Button	Icon	Description
Information	Receive License		Use it to go to 2checkout.com and buy the Proversion of the program.
	Activate	₹	Use it to activate the program by entering the License Key.
	About	\odot	Use it to read a License Agreement for this program.

Please note that if you already use a Pro version of **VSDC Video Editor**, these buttons are disabled.



Projects/Objects explorer





The **Projects/Objects explorer** area is located on the left side of the main window. It contains two tabs: Projects explorer and Objects explorer. You can switch between tabs by a simple click on one of them.

The **Projects explorer** shows all currently opened projects and scenes they contain. To go to a scene you need to edit, click its name with a left mouse button. Use the right mouse button to see the context menu with all the available options.

The **Objects explorer** shows the objects used within a selected scene. To select an object, click it with a left mouse button. Use the right mouse button to see the context menu with all the available options. To find an object or its location, enter the object name in the search bar at the top.

You can hide this area so that it occupies less space of the main window clicking the **Auto Hide** icon or you can even close it if you don't use it while working on your project. To enable this area, go to the **View tab** and click the corresponding buttons.



Template window

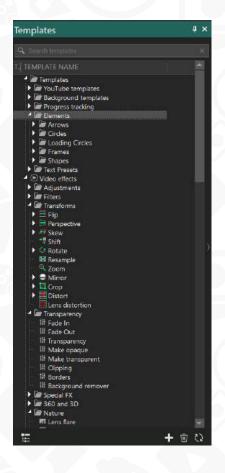
The **Template window** is located in the project/object explorer area. Before the first use, it is required to synchronize the templates with the server using the same titled option in the bottom left corner. After synchronization, you will see a list of all templates stored on the VSDC cloud. Whenever an effect requires an update, it will be marked with a small blue dot in the template window, and you will be able to update it separately.

To apply one of the available templates, double click the media file you want to change and drag an effect from the Template window to the scene or the timeline. By default, the editor uses standard effects from the video effects menu or modified templates with default settings.

The structure of the templates list shown can be sorted manually, and each effect can be customized in the properties window and then saved in the library as a custom template. To change one of the available templates, right-click it and select one of the 16 additional features:

- Add a template
- Add a child template
- Add folder
- Add child folder
- Move inside
- Move outside
- Remove items
- Expand all child templates
- Collapse all child templates
- Show in effect presets
- Use default properties
- Use as a transition
- Use default duration
- Synchronize templates
- Preview template
- About the template...





Note that in the Templates window, you can save a template along with the video you used, or save a sprite with a group of effects.

For more convenient navigation among the templates, there is a search field at the top of the window. As soon as you type in the name of the template, you'll instantly have the effect you're looking for pop up in the search.

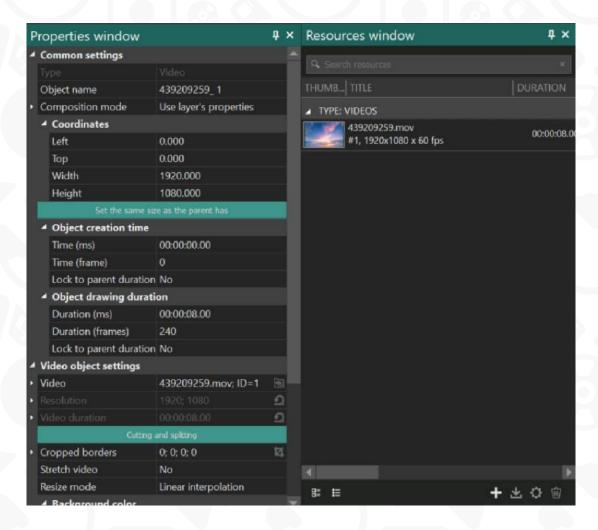
When searching for a template, you can utilize the 'Filter effects by name and type' option located in the lower-left corner. This allows you to display either objects with the same name or objects with the same name along with their corresponding presets.



Properties/Resources window

The **Properties/Resources** window area is located on the right side of the main window. It contains two tabs: Properties window and Resources window. You can switch between tabs by a simple click on one of them.

The **Properties window** displays the parameters of the selected object (video/audio file, image, text, graphical object, video/audio effect, etc.) and allows for adjusting them. To adjust a parameter, click with a left mouse button and enter an appropriate value or select the necessary option from the drop down menu.



Notice: you can edit multiple files or effects simultaneously. Just select the files on the timeline and go to the Properties window to identify and adjust common parameters, such as file duration, audio settings, or cropping. Common parameters are highlighted in white; parameters that are individual for each object are highlighted in green and can't be edited.

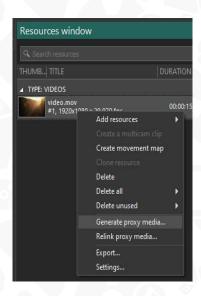
The properties window also allows for adjusting the parameters of multiple files or



effects at the same time. Just select necessary objects on the timeline. Parameters that can be changed will be highlighted in green. Please note: the options for modification are limited and vary depending on the selected files.

The **Resources window** displays media resources used in the currently opened project. They are divided in four main categories: Animation, Images, Sounds, and Videos. You can add more media files or delete unnecessary ones clicking the right mouse button and selecting the corresponding option from the context menu. You can also easily find a file by using the search bar at the top or find sources in Timeline window, Object explorer, Preview in sources or Show in folder with a right-click.

In the Video category, the **Resources** window plays a distinct role by allowing you to create proxy copies of video files. These proxy copies can greatly reduce or eliminate lag during preview playback. To generate a proxy copy, simply right-click on the desired file and select **Generate Proxy Media** from the options.



If the corresponding button below the preview window (located in the **Timeline area**) is enabled, the proxy file will be immediately displayed in the preview.

Additionally, you'll also find the **Relink Proxy Media** option, which allows you to specify the path to the required file on your computer. This is particularly useful if you have already generated a proxy copy of the file in another project and need to link it to the current project.





At the bottom of the Resource window, there are file management tools:

- Add media
- Export media
- Show resource settings
- Delete selected resources
- View/hide thumbnails

Keep in mind: the Resources window is essentially a customizable table. You can change the type of displayed information, its order, include or exclude particular columns, and so on.

You can hide this area so that it occupies less space of the main window clicking the **Auto Hide** icon above or you can even close it if you don't use it while working on your project.
To enable this area, go to the **View tab** and click the corresponding buttons.



Source window

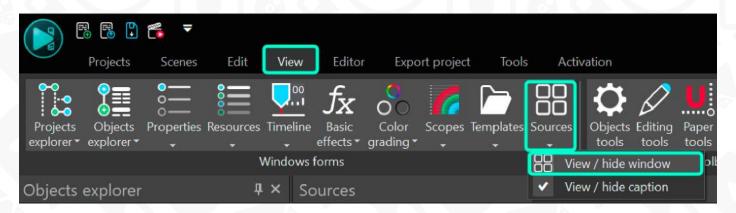
The **Source window** is a useful tool located to the right of the **Projects/Objects Explorer** and Templates window. It serves multiple purposes, including working with multicam files, viewing project objects from the **Resources window**, and previewing effects from the **Templates window**.

For detailed instructions on using the **Source window** with the <u>"Multicam" on page 166</u>.

This section will provide you with a comprehensive guide on how to use the Source window for viewing project resources and previewing effect templates.

To open the **Source window**, follow these steps:

- 1. Go to the **View** tab on the application toolbar.
- 2. Locate the **Sources** icon.
- 3. Click on the dropdown menu below this icon.
- 4. Select **View/Hide Window** from the available options.



Once the Source window is open, you will find the **Source or Multicam** menu in the lower-left corner. Here we will focus on the Source menu.

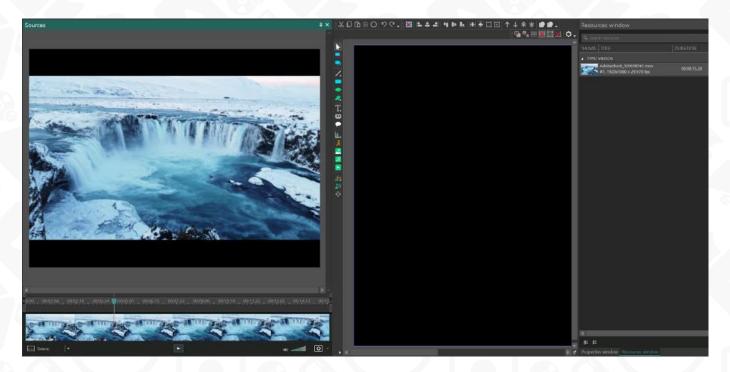




Viewing Project Resources:

- Navigate to the **Resources window** to view all the files added to your project.
- 2. Browse through the files in the Resources window looking for the desired file to add onto the timeline.
- 3. Select a file, and it will appear in the **Source window** for preview.
- 4. Use the **Play** button in the Source window to play the selected media file.
- 5. Once you have found the desired file, you can drag and drop it from the **Resources window** onto the timeline for further editing.

This feature is particularly useful when dealing with projects that contain a large number of files, allowing you to easily locate and preview specific media files before adding them to the timeline.



Previewing Effect Templates:

If you are working with the Templates window and want to preview how different effects would look on the file before applying them, follow these steps:

1. Click on any of the effect templates shown in the **Templates window**.



- 2. The selected effect template will start playing in the **Source window**, giving you a visual representation of its impact.
- 3. Once you have found the desired effect, click on the object to which you want to apply it on the timeline, and drag this effect onto the **Scene**. This will apply the effect to the selected object, and you can locate it by double-clicking on the object. If you want to apply it to multiple objects, select all the objects and drag the effect onto the scene.



This functionality enables you to assess and compare different effect options without directly applying them to the final file.



Basic effects window

The **Basic effects window** area is located on the right side of the main window. It's designated for working with advanced color correction tools. It contains three tabs: **Basic correction, RGB curves and YUV curves**. The **Basic correction** field displays main parameters for color correction such as Brightness, Contrast, Gamma, Temperature, Saturation, etc, and allow users to set required effect levels. To adjust a parameter, move the slider. If necessary, you can reset the parameter to 0. LUT presets can be selected in the same field.

In the **RGB curves** field you can adjust red, green, and blue channels manually to implement significant tonal changes. There is an option for creating and saving presets.

YUV curves are available for adjustment in the corresponding field. You can set In and Out values for the curves manually or change Input and Output. Templates can be saved and used in following editing.

On the top of the window you can set the Rotate angle or apply a Flip to the object. Rotation can be performed right on the scene.

Note that in the Basic Effects window, you can change parameters for multiple media files simultaneously. Just highlight the required images or videos on the timeline to adjust the settings.

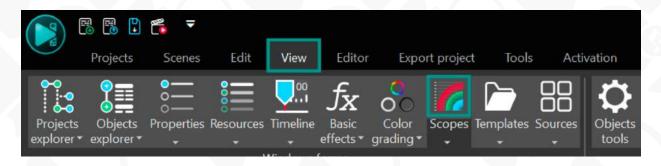




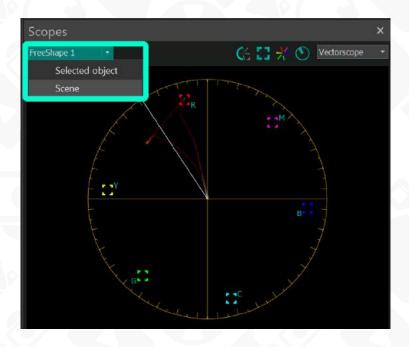
Scopes window

The **Scopes window** in VSDC Video Editor is a powerful tool that allows you to analyze the pixel values of a frame using histograms. **Histograms** are visual graphs that display the pixel values of a frame, enabling the analysis of brightness, contrast levels, and color balance of an image. They provide objective information about the characteristics and deficiencies of the image, helping to determine if color correction is required.

In VSDC Video Editor, you can access histograms in the **Scopes window**, typically located in the bottom right corner of the software. If you don't see the window, navigate to the View tab in the upper part of the program and activate the corresponding option.

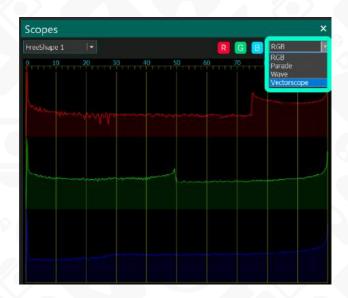


At the upper left corner of the Scopes window, you'll find a dropdown menu that allows you to select the object to be analyzed: the selected media file or the overall scene. To fix your selection, click on the selection field with the left mouse button, then with the right mouse button to confirm.





In the upper right corner, there's another dropdown menu offering four Scopes modes: **Wave, Parade, RGB**, and **Vectorscope**. Each mode provides information on the brightness and saturation of the pixels in the frame, with slight differences in representation and details.



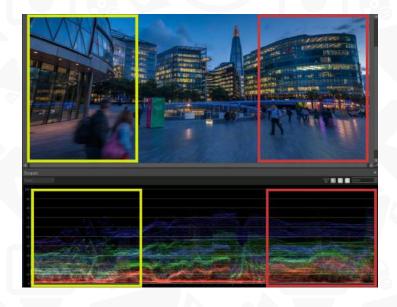
Let's explore each mode in more detail.

Wave

By default, the Scopes window displays the **Wave mode**, which allows you to analyze the brightness and color values of the scene or selected object. When you place the cursor on a frame in the timeline, you can observe the characteristics of that frame represented as pixels in a wave form on the graph. It's important to note that each column on the graph corresponds to a column of pixels in the object.

The horizontal axis (X-axis) on the graph represents the distribution of color tones of the object from left to right. This means that the left side of the object corresponds to the left side of the graph, and the right side of the object corresponds to the right of the graph.





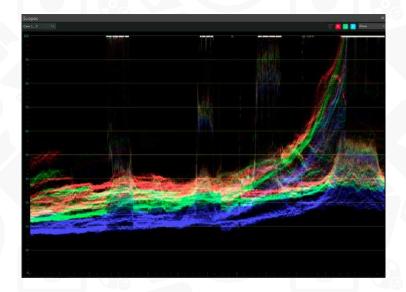
The vertical axis (Y-axis) of the graph represents the brightness of color, ranging from 0% for black tones (shadows) to 100% for white tones (highlights).



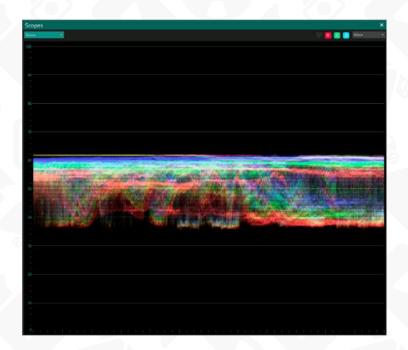
Let's review several specific examples of using this mode:

• **Uneven brightness**: If the graph shows a significant imbalance in the heights between the left and right sides, it may indicate an uneven distribution of brightness. In such cases, you can use the corresponding tools in the Basic Effects window above the Scopes to adjust the brightness or contrast levels and achieve a more balanced distribution.



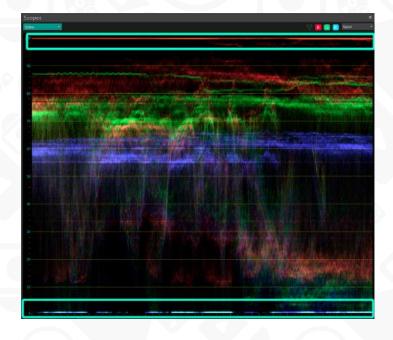


High or low contrast: If the graph shows a narrow and high waveform, it
may indicate a high contrast in the object, where bright and dark
areas strongly contrast each other. In this situation, you may need to decrease
the contrast or adjust it to achieve the desired level.

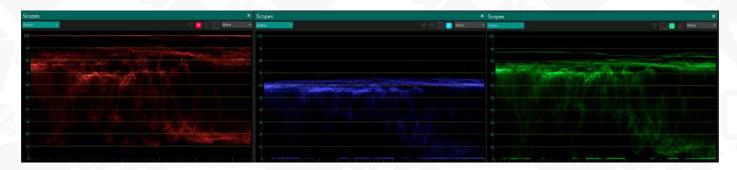


• Lack of details in shadows or highlights: If the graph shows clipped peaks, it may indicate a loss of details in the shadows or highlights of the image. In this case, you can adjust the brightness and contrast to restore the details and create a more balanced image.

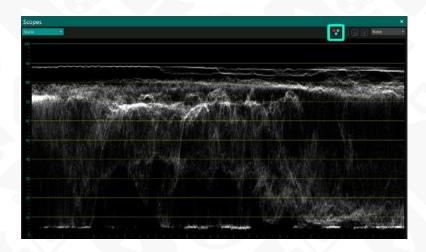




By default, the waveform displays **RGB** values (Red, Green, Blue) for each pixel. If you need to not only evaluate the brightness and contrast levels but also determine which color components predominate in each area, you can activate the RGB mode:



However, if you want to solely focus on the levels of brightness without being distracted by the color components of the object, you can switch to the **Luma** mode. This mode will display the histogram in black-and-white, showing only the relevant brightness characteristics.





Parade

The **Parade mode** is useful when you want to determine the predominant color (red, green, or blue) in the scene or object. In this mode, the color channels are displayed closely together without crossing. The **horizontal axis** (X-axis) represents the selected frame in pixels, with three miniature graphs for red, green, and blue colors respectively, maintaining their orientation. The **vertical axis** (Y-axis) represents the brightness of the color from dark to light.

By analyzing the graphs of each color channel, you can determine their respective predominance. If one color channel's graph has a higher peak or if the waveform is positioned higher on the graph, it indicates that there are more pixels of that color in the scene or object.



The **Parade mode** provides a detailed examination of color distribution. If you need to correct a specific color channel, we recommend using the **RGB curves** tool available in the **Color Grading** panel. Additionally, you can focus on a specific color by disabling the display of other channels using the corresponding buttons above the graph. This allows you to isolate and make adjustments to individual color channels as needed.





RGB

In **RGB mode**, the graph displays curves for the three color channels: Red, Green, and Blue. Unlike other modes that are linked to pixel columns of the frame, RGB mode provides tonal information about the object as a whole.

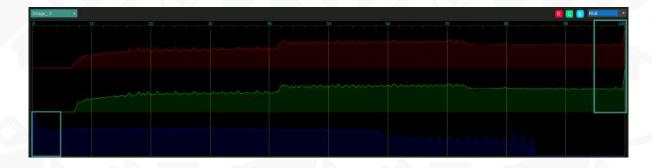
Each color curve is represented by a separate line, showing the distribution of brightness values in a color channel. The horizontal axis represents different levels of brightness, while the vertical axis displays the quantity of pixels at each level.

Analyzing the RGB curves, you can evaluate the overall brightness and tone of the object. The height and shape of the curves provide information about the predominant color channels and the distribution of brightness among them. Here are a few examples to consider:

 If the curve of one color channel is higher than the others, it indicates that the object contains more brightness in that particular color.



 If the values on the graph in one or several color channels extend beyond the limits of the graph from the right or left side, it suggests a loss of color hues. This means that the corresponding color components are missing or insufficient.



• If the graph is shifted to the left, it indicates an underexposed image, where the brightness and details in the dark areas are not prominent enough.





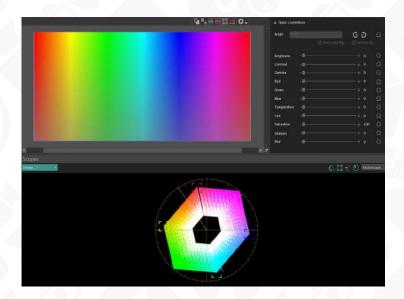
 If the graph is shifted to the right, it indicates an overexposed image, where the brightness and details in the light areas are lost.



By analyzing the RGB curves, you can gain valuable insights into the overall tonal distribution and make adjustments to achieve the desired color balance and exposure in your video.

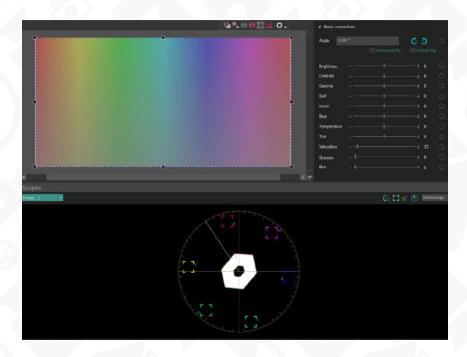
Vectorscope

Vectorscope is a powerful tool for visualizing and analyzing the color components of an object. It presents the hues and saturation levels of colors in a selected frame using a circular diagram divided into segments. Each segment represents a specific color, such as yellow, red, magenta, blue, and others, indicated by corresponding square brackets.



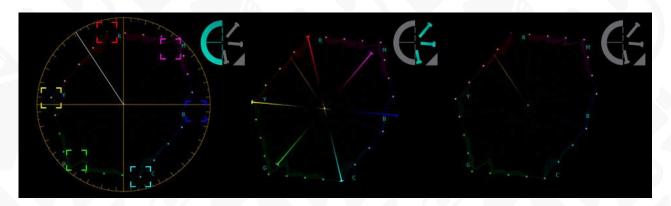


Each color segment on the vectorscope has a **radius**, representing the distance from the center of the diagram to the edge. The length of the radius indicates the saturation or intensity of the color value. A longer radius indicates higher saturation, while a shorter radius indicates lower saturation. For example, if the color value extends beyond the radius of the diagram, it means that the frame is oversaturated.



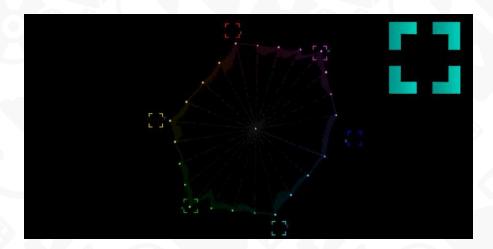
Above the vectorscope, you will find four options with additional functions:

• Vectorscope modes: The first icon from the left allows you to select from three available display modes. The classic mode displays a vectorscope graph as a traditional circle diagram with indicators, providing a general idea of color distribution in a frame. The vector mode splits the diagram into sectors of different colors, allowing for a more detailed examination of color distribution and specific hues. The Hide graticule/vectors mode shows only the color values of the object on the vectorscope, hiding the sectors, circle, and indicators. This mode is useful when you want to focus solely on the color of the object.

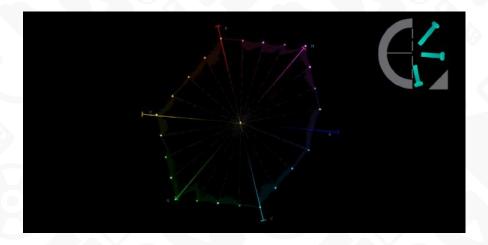




• **Color borders**: The second icon controls the display of color borders represented as square boxes. There are six of these boxes, and they indicate excessive saturation of the object.

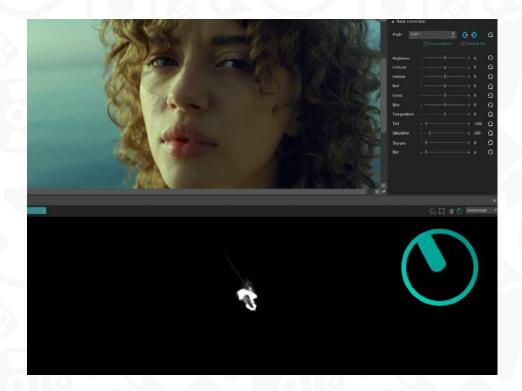


• **Color mode**: The third icon allows you to toggle the display of color in the graph. When activated, the diagram displays the color palette, illustrating the distribution of hues. When deactivated, the graph displays black, gray, and white hues.



• **Skin tone radius line**: The last icon activates a line indicating optimal color values for more precise skin tone adjustment. When analyzing a frame with a person in it, you can observe how the pixels on the graph align with this line. If the pixels match the line, it indicates that the color values in the frame correspond to the optimal skin tone color. If the pixels deviate significantly from the line, color correction may be needed to align them.

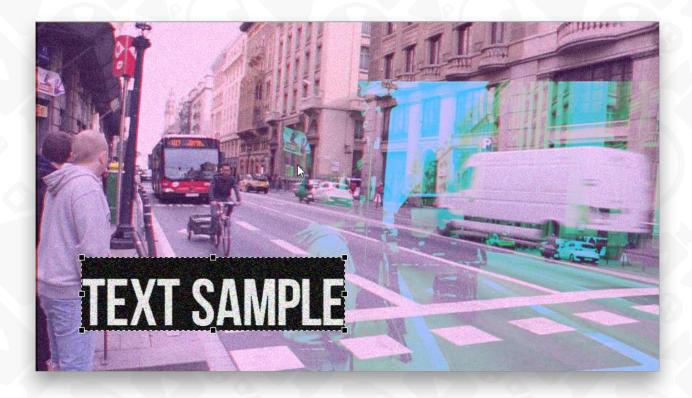




Once you have selected the mode, you can analyze how the colors and saturation levels are distributed on the vectorscope. If you notice any unevenness or issues on the graph, you can use the corresponding color correction effects or tools from the **Lift, Gamma & Gain** tools in VSDC. These tools allow you to adjust color values, saturation, and other parameters to achieve the desired result.



Scene Area



The **Scene area** is located in the center of the main window. It allows you to visually control all the editing operations you perform. It displays one particular moment of your video, the moment where the cursor is located at the **Timeline**.

Dashed lines and several black squares surround a selected object on the **Scene area**. That means that you can move this object, change its size or adjust other parameters. Click the right mouse button to use the available options in the context menu of the selected object.

You can also select multiple objects at once. To do it, hold down the **Ctrl** button on your keyboard and click necessary objects on the **Scene area**.



Timeline Area

The **Timeline area** located under the **Scene area** is the main editing tool of the program. It represents a time scale with several lines designed for the media files you load to your project, graphical objects you add and various effects you apply. It also has many useful buttons and options helping you achieve the best result.

At the top of the **Timeline area**, you can see the following toolbar:



Button group	Button	Icon	Description
Timeline Zoom Tools	Increase scale	•	Use it to increase the timeline scale.
	Decrease scale	Θ	Use it to decrease the timeline scale.
	100% scale		Use it to set 100% timeline scale.
	Timeline scale	- +	Use it to find the appropriate scale using a slider.
	Scale by work area	(1)	Use it to zoom in a particular moment of the video. First, select a work area moving grey rectangles under the time scale, and then click this button.
Playback tools	Show proxy files	Ęâ	Use it to show proxy or montage files.
	Preview video with chosen quality	● 720p ▼	Use it to play the video and preview the result of your work in a separate window.
	Play/ pause scene	•	Use it to preview the adjustments directly on the scene.
	Play work area only	H	Use it to preview only the selected area on the timeline.
	Return cursor to begin	פו	Use it to move the cursor to the very beginning automatically after the preview pauses.
	Loop playing	9	Use it to loop the video playback.



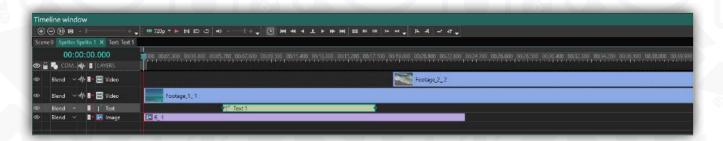
	Mute/ unmute sound	Use it to mute the video playback.
	Volume	Use it to adjust the volume of the preview.
Timeline Management Tools	Show time/ frame	Use it to switch between time scale and frame scale views.
	Move to begin	Use it to move the cursor to the very beginning.
	Move to previous second	Use it to move the cursor to the previous second of the video.
60	Move to previous frame	Use it to move the cursor to the previous frame of the video.
	Create marker	Use it to add a comment marker and indicate important points on the timeline, or select the segmentation marker type if you want split your video into parts before export.
	Move to next frame	Use it to move the cursor to the next frame of the video.
	Move to next second	Use it to move the cursor to the next second of the video.
	Move to end	Use it to move the cursor to the end of the video.
	Set work area	Use it to set the work area so that it fits the selected object.
	Start work area	Use it to set the beginning of the work area by the cursor position.
	Move work area	Use it to move the work area so that it starts at the cursor position.
	Align work area	Use it to move the work area so that it ends at the cursor position.
Timeline Blocks Management	Cut out fragment	Use it to cut out the selected fragment of your video.



Sp pai	lit into rts	Use it to split the video file into two fragments by the current cursor position.
	ove ocks	Use it to move blocks (several selected objects) so that they start at the cursor position.
Aliq	gn ocks	Use it to move blocks (several selected objects) so that they end at the cursor position.
Se blo	ocks	Use it to put blocks (several selected objects) so that the second starts at the end of the first one.
	t order th offset	Use it to put blocks (several selected objects) so that they follow one by one with offset.
En are	d work	Use it to set the end of the work area by the cursor position.

To disable any of these buttons click a small arrow next to each section, select the appropriate button group and uncheck unnecessary buttons. You can enable them or **Reset Toolbar** any time later.

Under the toolbar described above, you can see the main working space of the **Timeline** area.



There are several tabs allowing you easily navigation between added objects. The tab has the same name as the selected object. Open the tab to apply additional effects to this particular element only. The **Timeline area** offers some useful instruments:

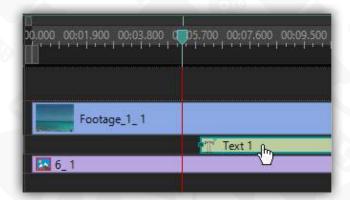


	/[
Name	Icon	Description
Cursor position	00:0	This bar is an information area, that shows you the cursor position value. You can also use it to move the cursor to a particular position. Just double click there and enter a new value.
Show/hide object	0	Use it to show/hide the object on the Scene area . Then the icon is enabled, the object is visually presented on the screen. If there is no icon next to the object, you cannot see it on the screen.
Lock/Unlock object		Use it to make the object unmovable and unelectable on the Scene area . Then the icon is enabled, it is impossible to move or select the object on the screen. You can select in on the Timeline area or via the Objects explorer . If there is no icon next to the object, the object is unlocked.
Composition mode	5	Use it to select one of the available modes of blending layers to achieve an extraordinary effect.
Show/hide waveform	**	Use it to show/hide the audio waveform of the video file added to the Timeline.
Show menu	直	Use it to show the context menu of the object and use one of the available options.
Layers		This column is designed to show you the type of the object added to the Timeline.
Cursor		This red vertical line indicates the moment shown on the Scene area . You can move the cursor with the mouse or using the appropriate buttons on the toolbar.
Work area	0 66	This area helps you work with more accuracy on a particular part of the video. To select this area, place the mouse cursor on grey rectangles under the time scale and move them to achieve necessary positions at the beginning and at the end of the desired fragment. After that, you will be able to zoom in this fragment clicking the Scale by work area button or apply video effects to the selected part only.



Each object you add while editing occupies its individual line on the **Timeline area** and represents a colored block. You can easily change the duration and the position of the block with a mouse.

To change the duration, place the mouse cursor on the block's boundary, it becomes a bidirectional arrow, and move it to the left or to the right.





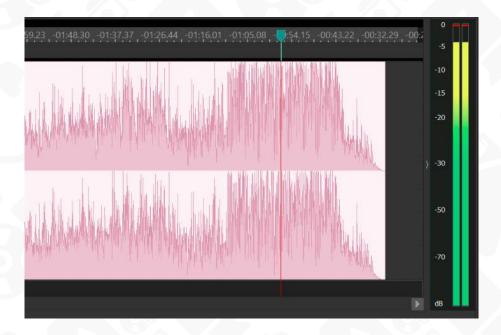
To change the position, place the mouse cursor in the center of the block, it becomes a hand shape, and move the block to the left or to the right.

Multiple objects can be placed in different layers and in one layer as well.



Playback volume window

On the right side of the timeline window, you will find an intuitive visual representation of the **audio volume during preview**, offering valuable insights into the dynamics of your audio.



The volume control tool displays the current volume level in decibels for each individual audio channel, presented in columns. The number of columns corresponds to the channels defined in your project, ensuring a comprehensive overview.

Using a gradient color scheme ranging from green to red, the window visually represents the averaged volume levels (RMS - Root Mean Square). The closer the color leans towards red, the louder the audio. Additionally, each column features a line indicating the peak volume value for the corresponding channel. The line changes from yellow to red the higher the volume is. This allows for simultaneous monitoring of both the average and peak volume levels.

It is important to note that the peak volume should not exceed the maximum 0 dB mark to prevent volume distortion, which can lead to audio artifacts such as sound clipping. This feature empowers you to easily identify volume changes, enabling you to determine whether adjustments, such as reducing the volume or adding additional effects, are necessary to achieve optimal audio quality in your projects.

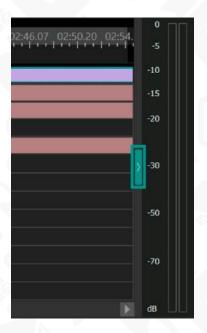
Hint: RMS (Root Mean Square) is a value used to measure the signal level in audio signals. The RMS value represents the root mean square of the signal's amplitude and is employed to determine the sound volume level.

Unlike a simple average value, RMS takes into account both positive and negative signal values, as well as its peak values, making it a more accurate indicator of the signal level.



The RMS value is commonly utilized in audio engineering to ascertain the sound volume level and establish a signal level that does not exceed a specific threshold to avoid sound distortion.

Additionally, on the left side of this window, there is an arrow that is used to show or hide this panel.





Color grading panel

The Color grading panel houses all the essential color correction tools and helps you perform a full cycle of color grading in one place, without having to switch between different effect layers and tabs.



The Color grading panel consists of 2 vertical menus with the following controls:

- 1. Basic color effects: Temp, Tint, Contrast, Brightness, Gamma, Saturation, Hue
- 2. Lift, Gamma, Gain & Offset color wheels
- 3. RGB curves and sliders
- 4. HSL curves and sliders
- 5. YUV curves and sliders
- 6. Color twist settings (RGB color channel components)
- 7. Optimized version of the LUT editor

Keep in mind: when you're working in the Color grading panel, the adjustments you make are applied to entire scene, for its entire duration. If you need to perform color correction for a selected object or make a temporary color changing effect, use the corresponding effect from the **Adjustments** group of the **Video effects** menu.

In the following section, we'll review Lift, Gamma & Gain color wheels designed for primary color correction. If you'd like to learn more about color correction effects available in VSDC, explore the instructions on our site:

https://www.videosoftdev.com/how-to-use-free-video-editor



Lift, Gamma, Gain & Offset color wheels

Lift, Gama, Gain is a set of color wheels for primary color correction. Unlike secondary color correction tools, such as LUT editor, which allows for working with isolated colors, primary color correction helps you change the entire color tone composition of the video.

To access the Lift, Gamma & Gain color wheels, open the **Color grading** panel in the bottom left corner:



Each wheel controls a range of tones. Lift primarily adjusts dark tones; Gamma primarily adjusts midtones; Gain primarily adjusts bright tones, and Offset adjusts the entire image.

Changing color values for dark tones, bright tones & midtones

To correct colors for a selected range of tones, use the control point in the center of the wheel and drag it to the desired color range to change the temperature or aesthetics of the video.

Notice: when you make changes in the Lift color wheel, the lightest areas remain almost unchanged, while the dark areas change depending on where on the color spectrum you're moving the control.





As you're moving the control point of the selected wheel, the RGB color values under that wheel are automatically changing, too. If you want, you can type the values manually or use the Up and Down arrow keys on your keyboard.

Below, there is a comparison of the blue color component increase for dark tones (Lift), midtones (Gamma), bright tones (gain), and the entire range of tones (Offset):





Although it's the same color component, the results vary significantly because the changes apply to different ranges of tones. The bright tones are barely affected when you're working with Lift; dark tones are barely affected when you're working with Gain, and both bright and dark tones are barely affected when you're working with Gamma.

The little red tumbler in the bottom left corner of the panel is called **Maintain luma level**. It keeps the overall level of brightness, regardless of the changes you make. We recommend keeping this mode on because it makes color adjustments more gradual.

Dark tone and bright tone pivot sliders, and B/W threshold

In addition to color values, you can change the brightness and contrast values in the video using the following sliders:

- Dark tone pivot at the Lift wheel
- Bright tone pivot at the Gain wheel
- Black & white (B/W) threshold pivot sliders around the Offset wheel

When you toggle the dark tone slider, all the dark tones below the selected value become darker. When you toggle the bright tone slider, it dims all the color tones and reduces the number of bright tones in the video, until the image becomes black.



The **black & white threshold** sliders decrease the level of contrast and saturation in the video. The slider on the left dims dark tones until the image becomes white, while the slider on the right decreases the contrast until the image becomes black.





Black point & White point



The next important part of the primary color correction toolset is the **Black point** and **White point**. These controls help you quickly fix overexposed or underexposed videos.

For example, if you have an overexposed video that looks too bright, select **Black point** from the panel and click on the area that's supposed to be black. The program will apply



black color to the selected area and recalculate the rest of the tones accordingly. Similarly, if your video is too dark, select **White point** and click on the area that's supposed to be white to rearrange all values.

Correcting isolated areas

If you need to perform color correction on an isolated area in the video or image, you can use the eyedropper tool in the bottom right corner of the **Color ranges** menu.

Click on the eyedropper icon and select the area you'd like to work on. Then tick the **Show corrected area** box at the bottom to only display the area you've selected.



If the original selection was incorrect, use the additional eyedropper tools to **expand or contract tone selection.**

Notice that by default, the eyedropper selects a range of tones, not an exact color (the long white extensions on the Hue graph visualize the range around the main color). If you want to do the opposite and select a specific color with no range, press and hold the Ctrl key while using the eyedropper. In that case, the Hue graph will have no white extensions.

You can increase, decrease, or shift the selected range of colors by manually typing the desired values or using the handles.



Various Toolbars

There are several toolbars allowing you quick use of all the available options. By default, they are located at the top or at the left side of the **Scene area**. To change their location, place the mouse cursor over the dotted line at the beginning of a toolbar, it turns to a four-side arrow, and move the toolbar to another place of the main window.

Objects Tools

The buttons on this toolbar repeat the options of the **Add object** dropdown list on the **Editor** tab.

Button	Icon	Description
Selection	•	This option is enabled by default allowing you to select and replace objects on the Scene area .
Sprite		Use it to add a Sprite object to your project.
Duplicate		Use it to create a duplicate of an object.
Line Curve line	/	Use it to draw a line or a curve line on your video or image.
Rectangle		Use it to draw a rectangle on your video or image.
Ellipse		Use it to draw an ellipse on your video or image.
Text	T	Use it to write a text message or add a counter to your video or image.
Counter	00:00	Use it to add counter to your video or image.
Subtitles	CC	Use it to add subtitles to your video or image.
Tooltip	2	Use it to add a tooltip to your video or image.
Chart	<u></u>	Use it to add a chart to your project.
Animation	.	Use it to create an animation within your project.



Image	尽	Use it to add an image file to your project.
Audio		Use it to add an audio file to your project.
Video		Use it to add a video file to your project.
Free shape	*	Use it to add a free shape to your project.
Audio visualization	ıllı	Use it to add audio abstraction to your project.
Movement	*	Use it to create a movement effect of an object.

Editing Tools



This toolbar repeats the **Editing tools** button group on the **Edit** tab.

To get further information about the toolbar, please refer to the appropriate section.

Paper Tools



This toolbar has the options allowing you to perform your editing operations with more precision.



Button	Icon	Description
Show grid		Use it to draw a grid over the Scene area .
Snap to grid		Use it to snap the selected object to the grid.
Show margin	00	Use it to draw a margin around the Scene area.
Snap to margin		Use it to snap the selected object to the margin.
Show object's alignment		Use it to show the alignment with respect to other objects.
Snap to objects		Use it to move the selected object to another object.
Settings	₽	Use it to change additional settings of this tool such as grid and margin size, grid position and appearance.

Layout Tools

This toolbar repeats the **Layout tools** button group on the **Edit** tab. To get further information about the toolbar, please refer to the appropriate section.



Zoom Tools



This toolbar helps you set the appropriate size of the **Scene area**. You can zoom it to screen, select a necessary value in percent from the drop down list or using a corresponding slider.

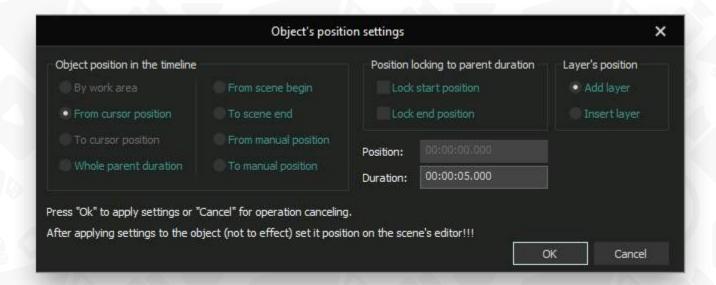


Additional windows

To simplify the work with **VSDC Video Editor** some editing operations are realized through additional pop-up windows.

Object position settings

This window appears each time you try to add a new object to the scene. Here you can select the position of the object on the **Timeline area** checking the appropriate box and clicking the **Ok** button.



It pops up immediately when you add a sprite, a duplicate, a graphical or a text object. When you add video, image or audio data, you should first find the media file on your computer HDD or your storage device and then set its position in time. Once the object is added, you will be able to change its duration and position manually on the **Timeline** or adjusting its parameters in the **Properties window**.

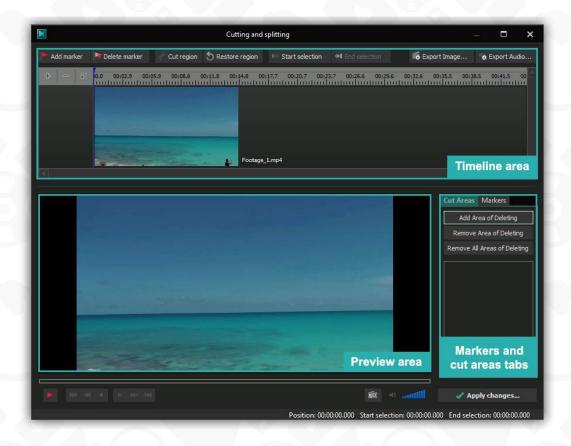
Video editor

An additional **Video editor** window appears every time you click **Cutting and Splitting** button or select this option from the drop down menu. It is designed to help you cut out unnecessary parts of your video or split it into several separate segments.

The window can be divided into three main areas:



- **Timeline Area** an area where you can select parts to delete or set markers to split the video by them.
- Preview Area a video player that displays a video file while editing.
- Markers and Cut Areas tabs an area where you manage the markers set on the video and the segments you want to delete.



To perform the main editing operations within this window, use the buttons above the **Timeline area**.



Button	Icon	Description
Add marker		Use it to set a marker on the Timeline . First, move the cursor (darkblue dashed line) to find an appropriate moment in your video, and then click this button. The moment will be marked by a red flag and its position will appear at the Markers tab. You can change the marker position moving the red flag on the Timeline .
Delete marker		Use it to delete a selected marker. First, select an unnecessary marker at the Markers tab and then click this button.
Cut region	*	Use it to cut a segment from your video. First, select an area to cut out moving the cursor on the Timeline (red dashed lines will mark the boundaries of the selected area) and then click this button. You will see a red triangle at the place of the deleted area on the Timeline and its position will appear at the Cut Areas tab.
Restore region	G	Use it to restore the segment you have cut. First, select it at the Cut Areas tab and then click this button.
Start selection	1+	Use it to mark the beginning of the area you plan to delete. First, place the cursor at the moment when this area starts and then click this button.
End selection	+1	Use it to mark the end of the area you plan to delete. First, place the cursor at the moment when this area ends and then click this button.
Export Image	0	Use it to take a snapshot from your video. Click it to define the path to the output image file and its format. Please note that once the parameters are set you can use the Create the screenshot button under the Preview area.
Export Audio	0	Use it to export audio data from your video file. Click it to define the path to the output audio file, its format and other parameters.

Once the work within this window is finished, click the **Apply changes**... button at the bottom right corner to save changes you made and close the window. If you don't need to save changes, simply close the window clicking the **Close** button at the upper right corner.



File's sequence wizard



To open this window click the **Run wizard** button on the **Editor** tab or select the **Run sprite wizard** option from the **Add object** drop down list on the same **Editor** tab. It helps easily load a series of pictures at once, create a slideshow, change sequence of files and insert transitions between them.

The window can be divided into four main areas:

List of Transitions - a full list of available transitions classed by categories.

Transitions Examples – various transition effects of the selected type.

Preview Area - a video player that displays the selected effect or video.

Storyboard Area – an area that shows the sequence of files and transitions between them.

In the middle of the window, there is a toolbar with basic commands.



Button	Icon	Description
Add files	\oplus	Use it to add new files to the Storyboard area .
Add effect	①	Use it to add a random transition effect. Click a small arrow next to the button and select either insert only one transition between two files or many transitions between all the files at the Storyboard . Please note if this button is disabled, click a small rectangle between two files where you plan to insert a transition effect.
Remove	\odot	Use it to remove a selected object (a file or a transition) from a Storyboard area . Click a small arrow next to the button and select to delete either all the files or all the transitions.
Select all	0	Use it to select multiple objects at the Storyboard area . Click a small arrow next to the button and choose to select either all the files or all the transitions.
To begin	H	Use it to move a selected file to the beginning of the sequence.
To forward	*	Use it to move a selected file forward.
To backward	*	Use it to move a selected file backward.
To end	₩	Use it to move a selected file to the end of the sequence.
Apply duration	1	Use it to apply the duration value that can be changed in the Duration field. You can change the duration of any selected object (a file or a transition).
Crop borders	耳	Use it to crop borders of selected video or image file.
Cutting and splitting	of	Use it to open an additional Video editor window that helps delete unnecessary scenes from your video or split it into parts.
Quick styles	ಹಿ⊤	Use it to apply various styles to the selected file.
Properties		Use it to open an additional window where you can see and change properties of the selected file.
Rotate 90 degrees	•	Use it to rotate your video file to 90 degrees clockwise.
Rotate -90 degrees	D	Use it to rotate your video file to 90 degrees counterclockwise.



To disable any of these buttons click a small arrow next to each section, select the appropriate button group and uncheck unnecessary buttons. You can enable them or **Reset Toolbar** any time later.

Once the work within this window is finished, click the **Apply settings** button at the bottom right corner to save changes you made and close the window. If you don't need to save changes, use the **Cancel** button or simply close the window clicking the **Close** button at the upper right corner.



Overview

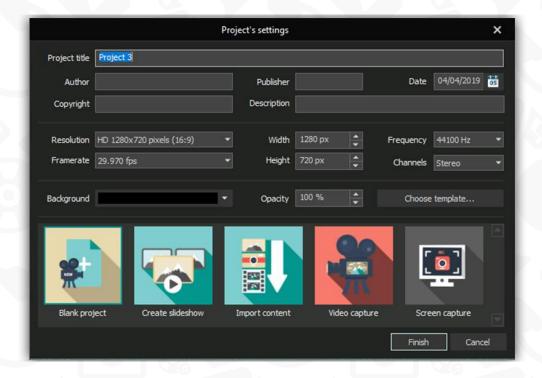
VSDC Video Editor is a fully featured video editing program for creating professional looking videos. Using this program, you will be able to:

- Load a wide variety of video file formats and codecs, including DVD, HD and GoPro videos.
- Capture video from a digital video camera, webcam or directly from a computer screen.
- Create videos for various multimedia and mobile devices.
- Export resulting files to popular social media resources such as Facebook, YouTube, Instagram etc.
- Overlay text, audio or pictures on your video.
- Apply various video effects, color correction and object transformation.
- Use the video stabilization tool for shaky footage.
- Add a customizable chart for a business presentation.
- Change the look of your video with Blending modes and Mask tool and many other operations.
- Add audio visualization.
- Create your own templates.
- Process 360°/3D footage and many other operations.



Working with projects Starting a new project

The work with **VSDC Video Editor** starts from creating a new project. Launch the program and click the **New project** button on the **Project** tab. The **Project's settings** window will appear.



Here you can write your own **Title** of the project, add its **Author, Publisher, Copyright** and **Description**. You can also define the **Resolution** of the video and set such parameters as **Framerate, Width and Height, Frequency and Channels** for audio, select an appropriate **Background** color and **Opacity** level for your project.

Choose templates... – use it to load ready-made background templates available from VSDC Store.

Please note that you can change these parameters even after the project's creation. They are all available in the **Properties window** of the program.

After that, select one of the option below:

- **Blank project** use it to open an empty project, so that you will be able to load media data any time later.
- Create slideshow use it to load a series of image or video files, insert various



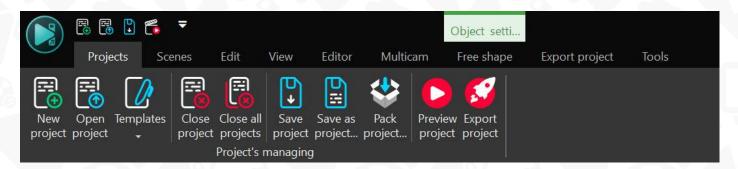
transitions between them and create your own slideshow easily.

- **Import content** use it to load some video or audio data from your computer hard disk drive or any storage device.
- Video capture use it to launch an additional application that helps capture video from a camera connected to your PC.
- **Screen capture** use it to launch an additional application that helps capture video directly from a screen of your computer.

Once all the parameters are set, click the **Finish** button.

Saving a project

Projects are very useful in case you don't have a possibility to create, edit and save your movie at once. If this is your case, you will need to save the project and continue your editing next time.



To save your project, use the **Save project** or **Save as project** buttons on the **Projects** tab. By default, the project files are stored following User/My Documents/FlashIntegro/VideoEditor, you can change this path if necessary.

The project file represents a data file with a **.vproj** extension containing the information on the editing operations you performed loaded video and audio clips, effects and transitions added to your movie.

When you launch the program for the next time, you will see a list of previously saved projects and you will be able to open any of them to continue working on it.

If you intend to work on your project on different machines, use the **Pack project** button. It will save a project file with input resources. The scene can be packed as well for transferring and working on another device.



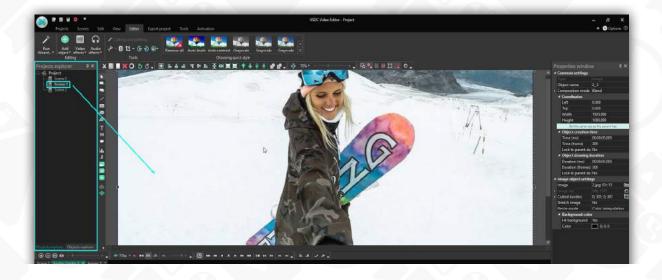
Working with scenes

The scene is a part of the project. There can be as many scenes as needed within one project. Open the **Scenes** tab of the Ribbon command bar to add a new scene, delete an unnecessary one or change the scenes' order. You can edit each scene individually switching between them in the **Projects explorer**.

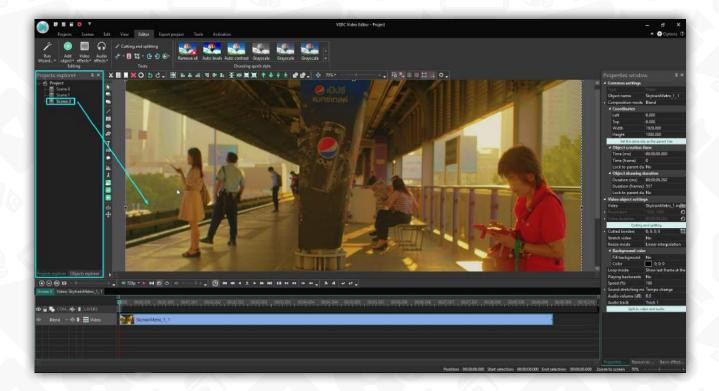
Let's see how it works. Here is a project **(Project 3)** with three separate scenes. The first scene **(Scene 0)** contains a video file modified by various effects. The second scene **(Scene 1)** consists of a series of pictures.



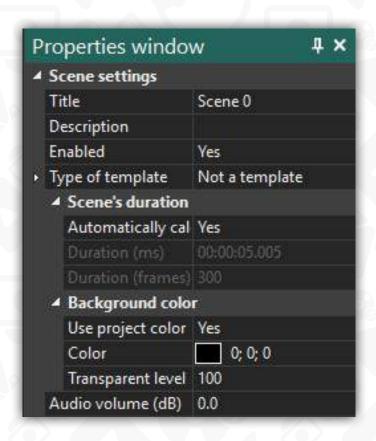
The third one (Scene 2) represents a loaded video file without any changes yet.







You can change the title of the scene, add its description, enable/disable it and change some other setting within the **Properties window**. To see the available settings, click the scene title in the **Projects explorer** with a left mouse button or use the right mouse button and select the **Properties** option from the menu.





When the work on all the scenes is over, you can save them as a whole movie. **Open** the **Export projects** tab, select an appropriate video format, change its settings if necessary and click the **Export project** button. The enabled scenes will be saved in one video file according to the order they had in the project.

There is a following sequence of scenes in our project:

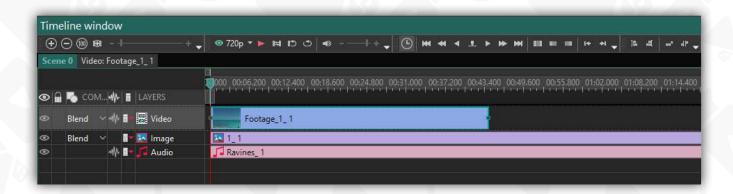


Adding video, image and sound

When you need to add some media content to the scene, you can do the following:

- 1. Use the **Add image, Add sound and Add video** buttons on the **Editing Tools** toolbar.
- 2. Click the **Add object** button on the **Editor** tab and select an appropriate option (Image, Sound or Video) from the drop down list.

After that, find a necessary file on your computer or other storage device and click the **Open** button.



Please note that if you load some content from a removable storage device, do not disconnect it until the end of the **Export project** process.

Define the position of the loaded file on the scene in the **Object position settings** window, click **Ok** and this file will appear on the **Scene area**. Objects can be inserted to a layer, added to a new layer above other objects and add to a layer above the selected object.

Each file has a few common and several individual settings that you can change within a Properties window of the program.

The **Common settings** are the following:

- Type indicates the type of the object. It is impossible to change this parameter.
- Object name indicates the name of the loaded file. You can change it clicking the **Object name** line and entering your own title.
- Composition mode indicates the default composition mode. You can change it



clicking the **Composition mode** line and selecting an appropriate mode from the drop down list.

- Coordinates indicate the position of the object on the **Scene area**. You can change the **Left, Top, Width** and **Height** parameters to set an appropriate object position.
- Object creation time indicates the time (in milliseconds and in frames) before the appearance of the object on the **Scene area**. By default, the **Creation time** has a zero value it means that the object appears immediately without any delay. You can also lock the creation time to the beginning of the parent object (the **Scene area** is a parent object by default).
- Object drawing time indicates the time (in milliseconds and in frames) during which the object appears on the **Scene area**. You can also lock the drawing time to the end of the parent object (the **Scene area** is a parent object by default).

Please note that when you decrease a video object duration, it becomes shorter and lasts only a specified period. When you increase the duration, the video becomes longer, the program show the last frame at the end of the video.

The individual settings depend on the type of the selected object. Below you can see the examples of the **Properties window** for different file type:



Video file settings

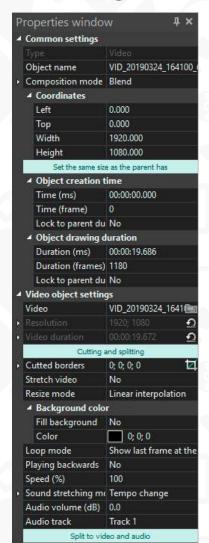
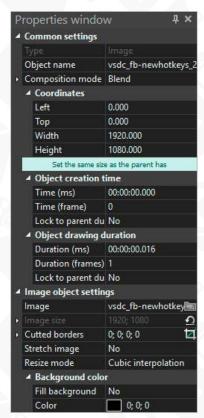
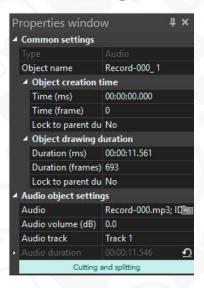


Image file settings



Audio file settings



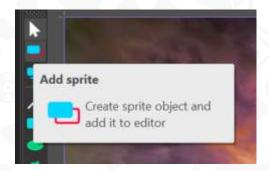


Sprites

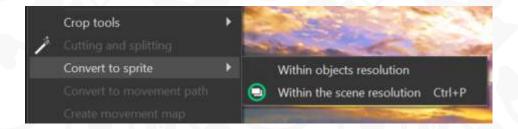
A **sprite** is a powerful tool that allows you to merge several media objects into one and apply effects to the entire group. By adding text, images, shapes, or videos to a sprite, you can create complex animations and effects that can enhance the visual impact of your video.

Sprite creation

There are two ways to create a sprite. The first method is to use the **Add Object** menu located above the scene area or the vertical toolbar menu on the left side of the scene. Click on the **Sprite** button to add it to the timeline, where you can then drag and drop media files into it.



Alternatively, you can use the second method by selecting the media files you want to include in the sprite on the timeline using the mouse. Then, right-click on those files and select **Convert to sprite**. This will merge the selected files into a single object, allowing you to make adjustments to the entire group. Sprites can be converted **Within objects resolution** or **Within the scene resolution**.



After successfully creating a sprite, it will appear on the timeline, indicating that it is now a part of your project. Regardless of the method used to create the sprite - whether it was done through the first or second method - the next step is to double-click on the sprite. This action will enable you to add new objects to it, adjust existing ones, or make any necessary modifications.





When you add or remove files from a sprite, the duration of the sprite remains the same. As a result, it's crucial to pay attention to the marker on the timeline to ensure that you are aware of the current duration of the sprite. Failure to do so may result in unwanted issues such as black frames appearing in your project or the files you added to the sprite not being displayed correctly.

Sprite properties

To access the settings menu, double-click on the sprite layer and head over to the Properties window. There are two groups of settings available: **Common settings** and **Sprite object settings**.

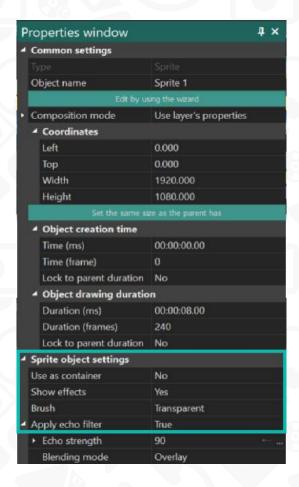
The **Common settings** allow you to rename the object on the timeline, set the precise time when the sprite will appear on the screen, and determine the duration that it will remain in the video. Additionally, you can use this group of settings to adjust the positioning coordinates of the sprite on the screen for ensuring that it is in the right place at the right time.

The sprite object settings offer options to adjust the appearance and behavior of your sprite. These include applying effects to all files contained within the sprite, and using the echo filter to add motion trails to your videos.

A sprite is essentially a container that facilitates the movement of objects along the timeline. However, any video effects or motions added to a sprite will not be visible in the project by default. To apply an effect to all objects within a sprite, you need to modify its parameters by changing **Use as container** to **No** and **Show effect** to **Yes**.







Use as container determines how the sprite is used: **Yes** signifies simple object grouping, while **No** groups objects and applies effects simultaneously.

The **Show effects** option is only available during edit mode and allows you to toggle effects on and off while editing a sprite. It is only active when **Use as container** is active as well.

You can adjust the background color using the **Brush** option. By default it is **Solid**, so you can fill the background area of the Sprite with a particular color. If you don't need a solid color, select Transparent.

Unless transparency is needed within the sprite, it is recommended to select the Solid option as it significantly improves video processing speed. **The Color** parameter specifies the background color.

Another setting available is the **Apply echo filter** option, which essentially simulates the long exposure effect or creates an artificial impression of fast-moving objects.

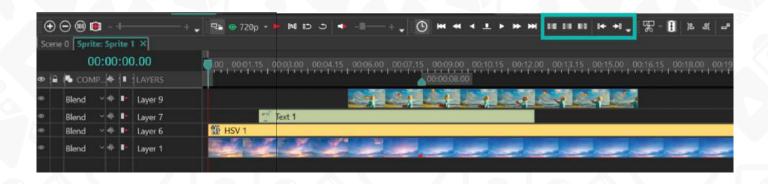


Cutting and Splitting

The program offers several convenient ways to cut and split the video.

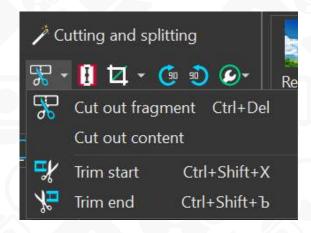
Cutting unnecessary parts

Method 1. It allows you to delete a part of the file directly on the **Timeline area**. First, set the **Work area** that corresponds to the unwanted fragment moving grey rectangles. Put the mouse cursor on the right rectangle and, once the cursor becomes a bidirectional arrow, move it to the right holding the left mouse button down. When the end of the fragment is achieved, release the mouse button. Do the same with the left rectangle to mark the beginning of the fragment to be deleted. For this purpose, you can also use the corresponding buttons on the **Timeline toolbar**.



Once the **Work area** is set, open the **Editor** tab and click the **Cut out fragment** button on the **Tools** section or above the timeline.

Please make sure that the video file from which you plan to delete a fragment is highlighted on the **Timeline**. It's also possible to cut out parts of several videos at once. Just click them with a left mouse button to select one video or multiple on the timeline.

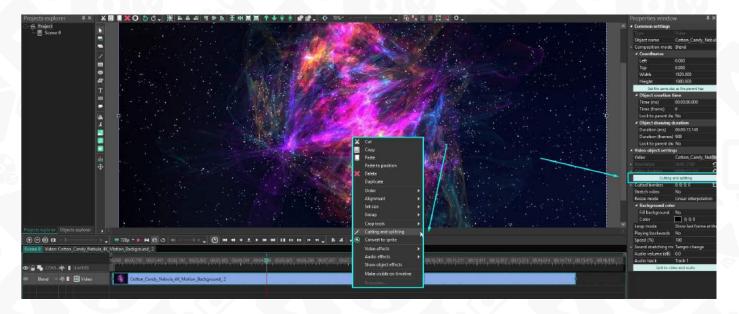




If you expand the cutting menu, you will see 4 options available:

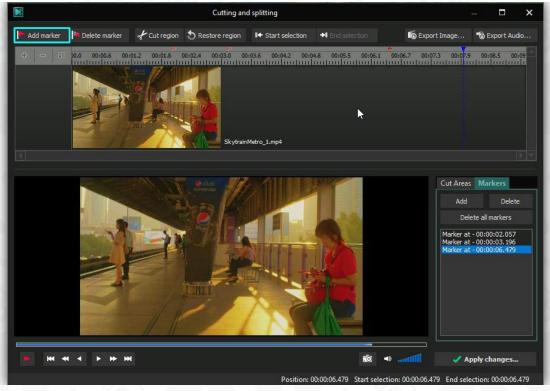
- **Cut out fragment** this option cuts out the selected area and splits the file into parts. If you need to recover the deleted frames, press the Shift key, grab the edge of the footage layer on the timeline, and drag it outwards.
- **Cut out content** this option cuts out the selected area without splitting the file. To recover the removed part, simply double-click on the marker that will appear after the cut-out.
- **Trim start/end** these options cut the beginning or end of the video without changing the file placement on the timeline or removing blank space. To restore the deleted frames, press the Shift key and drag the edge of the footage outwards.

Method 2. It offers you more possibilities because it is done within an additional **Video editor** window. To open this window:



- Right click the video file on the **Timeline** and select the **Cutting and splitting** option of the menu.
- Click the video on the **Timeline** and select the **Cutting and splitting** option within a **Properties window**.
- Open the **Editor** tab and click the **Cutting and splitting** button on the **Tools** section.





To select a fragment in the opened window, put the dark-blue cursor to the beginning of the fragment you want to delete. When the mouse cursor becomes a bidirectional arrow, hold the left mouse button down to stretch the area of deleting. Once the end of the unnecessary fragment is achieved, release the mouse button. You can always adjust the boundaries of this fragment moving the red lines to the left or to the right.

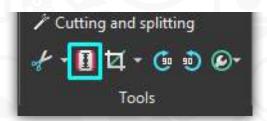
Click the **Cut region** button to delete the selected fragment. The same way you can delete all unnecessary segments of the video.

You have a possibility to restore the deleted fragment clicking the **Restore region** button or using the **Remove Area of Deleting** button on the **Cut Areas** tab next to the preview window. All the editing operations will take effect only after hitting the **Apply changes** button.

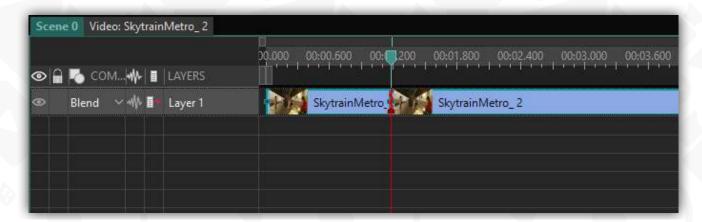
Splitting video into parts

Method 1. It allows you to split your video in the simplest way. Select the file you want to split by a single mouse click on the **Timeline**. Place the cursor to the point where the first fragment should end and the second should begin. Then click the **Split into parts** razor-like looking button on the **Tools** section of the Editor tab or above the timeline.





After that, you will get two video fragments placed in one layer on the Timeline. You can also split multiple files at once. To do this, select all required video and audio files on the timeline. If you need to recover the deleted frames, press the Shift key and drag the edge of the footage outwards.

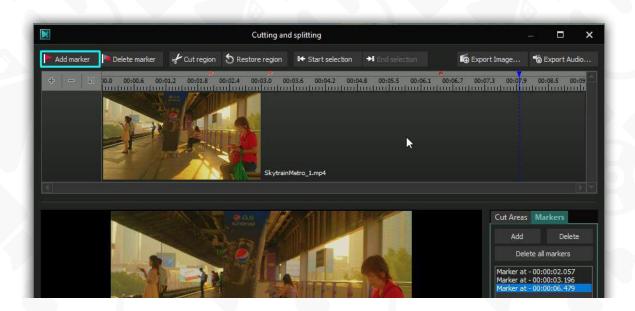




Method 2. If you need to get several parts of your video at once, open the additional **Video editor** window:



- Right click the video file on the **Timeline** and select the **Cutting and splitting** option in the menu.
- Click the video on the **Timeline** and select the **Cutting and splitting** option within a **Properties window**.
- Open the **Editor** tab and click the **Cutting and splitting** button on the **Tools** section.



In the opened window, you can set markers to divide the file into the required number of parts. Put the dark-blue cursor at the moment where your file should be split and click the **Add marker** button. A red flag will mark this moment and its position in time will appear on the **Markers** tab next to the preview window. You can change the marker position moving the red flag on the **Timeline**.

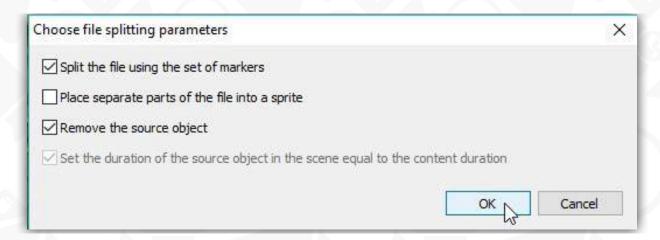
The same way put as many markers as necessary. To delete a marker, use the **Delete** button on the **Markers** tab. After hitting the **Apply changes** button, you will see a pop-up window allowing you set some more settings.

Split file using the set of markers – use this option to split your file according to the markers you have just put.

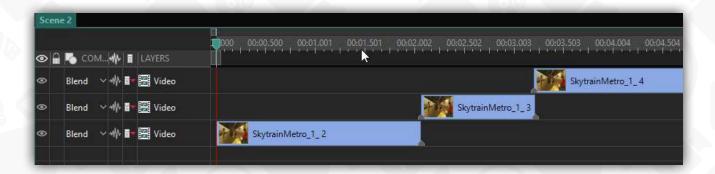
- Place separate parts of the file into a sprite use this option to place each part into a sprite and be able to apply effects and changes to this particular part only.
- Remove the source object use this option to delete the source file from the Timeline and continue working with separate parts.



• Set the duration of the source object in the scene equal to the content duration – use this option if you don't want to delete the source object.



Check the necessary boxes and click the **OK** button. After that you will return to the **Main window** of the program and will see separate parts of your file placed on the **Timeline** according to the selected parameters. For example, if you leave the default parameters, you will see the following.





Cropping video borders

VSDC will help you crop video borders precisely, get rid of the black bars surrounding your video or accidentally recorded objects.



- 1. Select the **Crop borders** option from **Tools** section.
- You will be offered to crop Custom region of a video or use the Autocropping feature. The latter means the video size will be automatically adjusted to the size of the scene.
- 3. Highlight a chosen region for cropping and click **OK**.

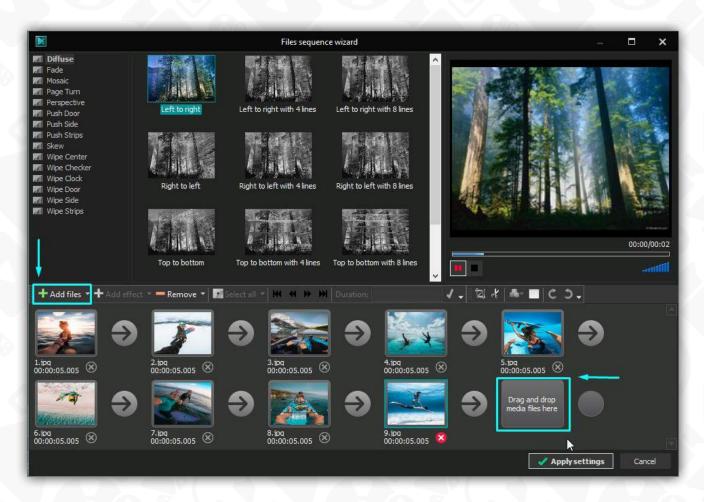


You can crop each video border precisely by manually changing their positions in **Properties** window.



Working with slideshow wizard

If you plan to create a slideshow, open the **File's sequence wizard** selecting the **Create slideshow** option when you start a new project or clicking the **Run Wizard** button on the **Editor** tab when you work on a current project.



In order to add a file you can simply drag and drop files to this area or use the **Add files** button on the **Storyboard toolbar** to select necessary files for your slideshow. Once the files are loaded, you can change their order, increase their duration or delete unnecessary ones using the appropriate buttons on the **Storyboard toolbar**.





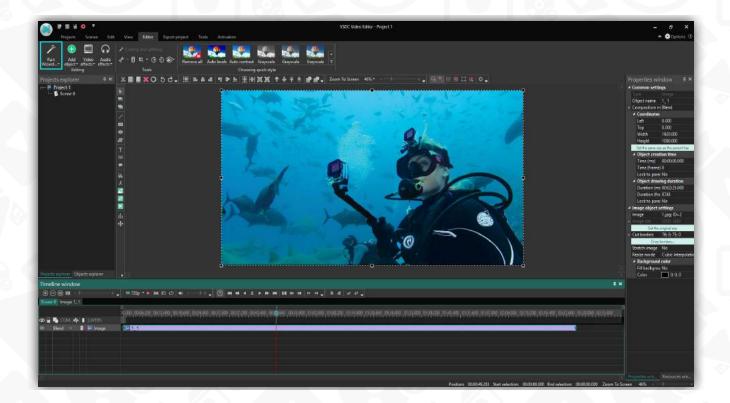
If you use some video files in your slideshow, you can remove borders, cut out fragments or split the video into parts (for example, to make a transition effect between separate scenes of the video). To do it, select the file to edit on the **Storyboard** and use the corresponding buttons on the toolbar to perform the necessary operations. In order to add a transition effect, drag the selected effect from the **Transitions examples** area and drop it between the files to which it will be applied. The square with a green arrow between two pictures means that you've successfully added a transition.

Use the **Preview area** to see the result of your editing operations and inserted transitions.



If you don't like the result, you can replace the transition by another one or delete it. Click the square between two pictures and use the **Remove** button on the toolbar or the **Delete** button on your keyboard.





After you have set the sequence of files and added the transition effects, click the **Apply settings** button. This window will close and a new sprite, which consists of all the files and inserted transitions, will be added to the scene.

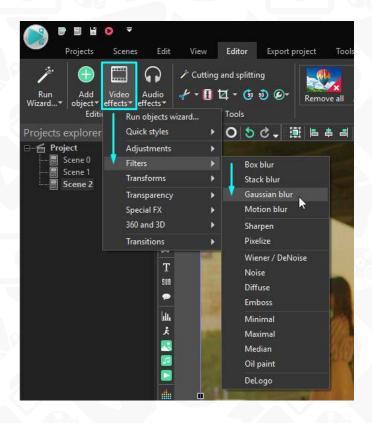
If you want to apply some changes to an existing sprite, click **Edit sprite/slideshow**.



Applying video effects

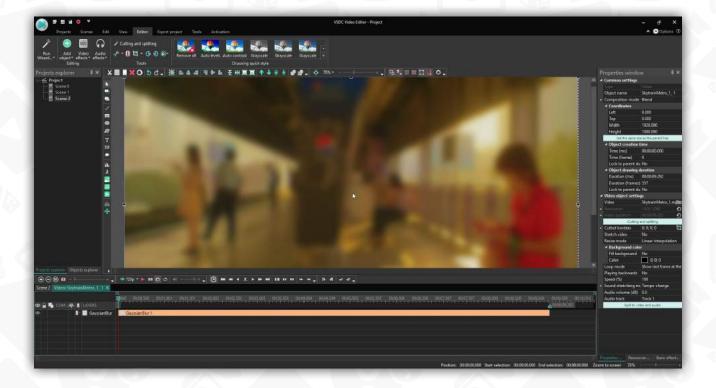
It is quite simple to apply one or multiple video effects to a video or image file loaded to the program.

- 1. Open the scene with the file you want to correct or modify and click it on the **Timeline**.
- 2. Open the **Editor** tab and click the **Video effects** button to select a necessary effect within the appropriate category from the drop down list. As an example, we select **Gaussian blur** effect in the **Filters** category.



After that, you will be able to set the effect position respectively to the media file in the **Object position settings** window. You can leave the default settings clicking the **Ok** button and change them any time later.





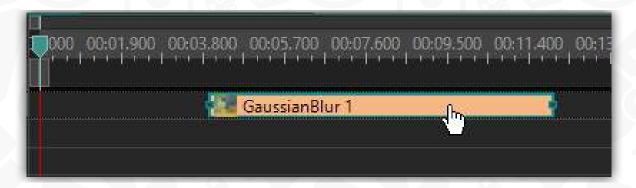
The selected effect will appear on the **Timeline area** as an object. It represents a colored block that occupies a single line and is located on a separate tab on the **Timeline**.



3. Each effect has a few common and several individual settings that you can change within a **Properties window**.

The **Gaussian blur** effect has the following individual settings: **Transparency, Extend the boundaries, Blur level.**





4. Change the effect position and duration if you need that it affects only a particular moment in your movie. To change the duration, place the mouse cursor on the block's boundary, it becomes a bidirectional arrow, and move it to the left or to the right.

To change the position, place the mouse cursor in the center of the block, it becomes a hand shape, and move the block to the left or to the right.



Group	Effect	Description
Adjustments	Color grading	Use it to apply the tools from the Color Correction
		panel to selected parts of a video.
	Auto level	Use it to automatically correct colors in your video or image file.
	Auto contrast	Use it to automatically correct contrast in your video or image file.
	Auto gamma	Use it to automatically correct gamma in your video or image file.
	Recover after auto gamma	Use it to cancel the gamma correction effect.
	Brightness/Contrast/	Use it to perform some color adjustments.
	Gamma	For brightness: negative values give a darker
		image and positive values give a brighter image.
		For contrast: negative values give lower contrast
		and positive values give higher contrast.
		For gamma: negative values give a darker image
		and positive values give a brighter image.
	Red/Green/Blue	Use it to adjust red, green and blue levels in your original video or image file.
	Hue/Saturation/Value	Use it to perform some color adjustments. Hue: shifts the hue of every color, giving unnatural
		colors.
		Saturation: makes colors to be desaturated or over saturated. The minimum value gives a black and white image.
		Value: makes the picture lighter or darker. The
		minimum value gives a black screen.
	Hue/Saturation/	Use it to perform some color adjustments.
	Lightness	Hue: shifts the hue of every color, giving unnatural colors.
		Saturation: makes colors to be desaturated or
		over saturated. The minimum value gives a black and white image.
		Lightness: makes the picture lighter or darker.
		The minimum value gives a black screen.



	Luminance/	Use it to reduced bandwidth for chrominance
	Chrominance (YUV)	components and transform colors in your video or
		image file.
	LUT	Use it to make footage look professional with one-
		click presets
	Color twist	Use it to adjust colors in the footage by working directly with the GRB color channels and changing tone values.
	Grayscale	Use it to transform colors of the picture to the gray part of the spectrum.
	Equalize	Use it to make colors more saturated.
	Equalize histogram	Use it to apply a quick filter for increasing an image contrast.
	Colorize	Use it to adjust red, green and blue levels in the black and white version of your file.
	Sepia	Use it to transform color spectrum to brownish and yellowish photo paper.
	Reducing bit resolution	Use it to give your image a fancywork look choosing an appropriate Dither type and
		changing the Noise and Levels values.
	Posterize	Use it to reduce the apparent number of colors in a clip, changing gradients into flat areas of color.
	Solarize	Use them to make video image reverse in tone.
	Parabolize	Dark areas will appear lighter and vice versa.
	Temperature	Use it to correct colors in video or images taken with incorrect white balance. Negative values make the image cooler and positive values make
		the image warmer.
	Inverse	Use it to invert the colors of an image.
	Negative	Use it to replace every color with its negative color, like a film negative.
	Black and white	Use it to turn videos into classic retro movies.
2	Threshold	Use it to determine how much contrast there is between neighboring pixels for the sharpening to affect them.
Filters	Box blur	Use it to create a kind of square distortion effect in the image.
	Stack blur	Use it to imitate a moving pile of colors.
	Gaussian blur	Use it to reduce contrast between adjacent pixels according to a mathematical equation.
	Motion blur	Use it to apply the dim effect in a specific direction useful for extreme sports footing.



	Sharpen	Use it to increase contrast and bring the images
		into better focus.
	Pixelize	Use it to fade an image into pixels.
	Wiener/DeNoise	Use it to apply a soft blur with a slight offset.
	Noise	Use it to add some texture to an image by way of
	Diff	tiny pixel dustings.
	Diffuse	Use it to make the selection look less focused.
	Emboss	Use it to give an image a 3D look.
	Minimal	Use it to emphasize the dark pixels in an image.
	Maximal	Use it to emphasize the light pixels in an image.
	Median	Use it to replace each pixel with a pixel that has the median color value of neighboring pixels.
	Oil paint	Use it to attach an oil painting look similar to that of the Prisma application.
	DeLogo	Use it to remove an unwanted object in a video.
Transforms	Flip	Use it to flip an image horizontally or vertically.
	Perspective	Use it to transform the perspective in an image horizontally or vertically.
	Skew	Use it to skew the entire image horizontally or vertically.
	Shift	Use it to move your image along X and Y axes.
	Rotate	Use it to rotate the entire image.
	Resample	Use it to multiply the entire image.
	Zoom	Use it to magnify or reduce the image.
	Mirror	Use it to duplicate a part of the image.
	Crop	Use this tool to remove unwanted video borders preserving the original aspect ratio.
	Distort	Use this effect to apply one of the distortion
	Diotort	presets to the video: Faceted glass, Fish eye,
		Swirl, Whirlpool, Twirl, Polar, Explode, Wave, and others.
	Lens distortion	Use this tool to fix images or videos shot with wide angle camera lenses.
Transparency	Fade in	Use it to make the video smoothly appear on the screen.
100	Fade out	Use it to make the video smoothly disappear from the screen.
	Custom transparency	Use them to adjust the transparency of the video
	Make opaque	or image file.
	Make transparent	



	Clipping	Use it to create a picture in picture effect adding a
	Olipping	part or a whole image to your video.
	Borders	Use it to create a frame around a photo or video.
	Background remover	Use it to remove background of the video and apply a chroma key effect.
Special FX	TV	Use it to imitate bad quality of the broadcast video signal. There are four types of TV effect available.
	Matrix	Use it to make the effect of falling code from the Matrix movie.
	Glitch	Use it to create distortions like old VHS tapes.
	Face landmarks	Use it to quickly add a motion tracked face mask to a video.
	Al art generator	Use it to turn your media into unique stylish masterpieces by using over 20 presets.
	VirtualDub filter	Use it to import VirtualDub plugins.
360 and 3D	360 to 2D	Use it to flatten 360° footage to a panorama angle.
	3D to 2D	Use it to convert 3D footage from stereoscopic view
Nature	Lens flare	Use it to imitate a strong source of light, such as sunlight both in the frame or outside of it.
	Bokeh glare	Use it to add a soft blurry background to your footage with lights shining through it.
	Raindrops	Use it to add the effect of falling raindrops to your video or achieve the foggy glass look.
	God rays	Use it to create the illusion of three-dimensional rays of light passing through the gaps in the atmosphere or added object.
	Fire	Use it to make a realistic fake fire on the video.
	Water	Use it to add raindrops falling into the water on your video.
	Smoke	Use it to create a smoky look of various intensity.
	Plasma	Use it to apply the effect of liquid plasma to the entire image or a part of it.
	Particles	Use it to add floating particles to the footage: leaves, snowflakes, or anything else.
	Shadow	Use it to create drop shadow effect for text and objects in video.



Transitions	Paper burn	Use it to create a transition that imitates a burning piece of paper opening the following scene or media object.
	Flow transformation	Use it to create a fractal-driven image distortion.
	Shattered mirror	Use it to make shattered glass effect transition.
	Paint brush	Use it to gradually cover the video with brush strokes, or reveal the next image from under a coat of paint.
	Chess	Use it to lay a semitransparent checkerboard on your video or image.
	Wipe	Use them to apply a transition where one shot
	Push	replaces another by travelling from one side of the frame to another or with a special shape.
	Mosaic	Use it to look through a grid of lines on your video or image.
	Page turn	Use it to turn a video image like a page of the book in various directions.
	Diffuse FX	Use it to gradually fill the screen with black pixels.
	Fade FX	Use it to gradually fill the screen with various textures.

For step-by-step instructions on applying effects, please, consult the How-to section of the official website: http://www.videosoftdev.com/how-to-use-free-video-editor

To see video tutorials on these effects and other functionality, visit https://www.youtube.com/c/VSDCFreeVideoEditor/about



Echo filter (visual echo effect)

The Echo filter can help you visualize a trail of object movement in a video where it wasn't originally present. You can think of it as an imitation of the long exposure effect or an unnaturally fast object movement.



Unlike most effects, Echo filter is available at the Sprite properties level, so you won't find it in the Video effects menu.

Here is how to apply the Echo filter to a video:

1. Convert the video into a sprite by using the Ctrl + K hotkey combination or clicking on the video with the right mouse-click and selecting **Convert to sprite**





- 2. Go to the **Properties window** on the right and select the following options:
 - Use as container No
 - Show effects Yes
 - Fill background No
 - Use echo filter True

By using these settings, you've applied the default version of the Echo filter. Feel free to use the preview option to see what it looks like.

Echo filter settings

To produce the echo effect, the software stacks frames from different times into one layer and gradually fades the trail as new frames appear.

Using the Properties window, you can change the number of visible frames and the way they blend together. Here are the settings you'll need to use:

Echo strength - affects the speed of trail fading. The higher this value is, the stronger the echo effect appears: for example, at 100, there's no fading and each frame is visible until the moving object reaches the end of the screen.

Blending mode defines the way the frames are blended, and therefore — the way the effect looks. There are 3 blending modes available in the menu:

- Overlay the mildest visual echo effect
- Streak the strongest visual echo effect
- Blur a strong smearing effect

The first two modes are optimal for video effects and videos with transparent backgrounds.



The third mode is optimal for non-transparent videos featuring moving objects.

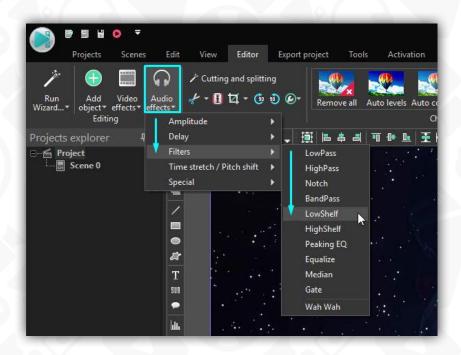




Applying audio effects

It is quite simple to apply one or multiple audio effects to a video or audio file loaded to the program. When you work on audio content, you can see it as a waveform on the **Timeline**. To do it, click the **Show/hide waveform** area next to the video or audio file and select **Show waveform** option from the menu.

- 1. Open the scene with the file which audio content you want to correct or modify and click it on the **Timeline**.
- Open the Editor tab and click the Audio effects button to select a necessary effect within the appropriate category from the drop down list. As an example, we select Low Shelf effect in the Filters category.



After that, you will be able to set the effect position respectively to the media file in the **Object position settings** window. You can leave the default settings clicking the **Ok** button and change them any time later.

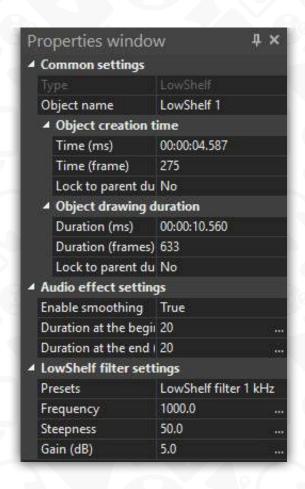
The selected effect will appear on the **Timeline area** as an object. It represents a colored block that occupies a single line and is located on a separate tab on the **Timeline**. The effect process audio in real time.

3. Each effect has a few common and several individual settings that you can change within a **Properties** window. The **Low Shelf** filter has the following individual settings: **Frequency, Steepness** and **Gain**.



You can also select one of the available **Presets** or create a custom one.

4. Change the effect position and duration if you need that it affects only a particular moment in your movie. Please refer to the **Applying video effects** section to learn how to do it.



List of available effects

In the table below, you will find all the video effects available in the program and their brief description.

Group	Effect	Description
Amplitude	Amplify	Use it to increase or decrease the sound volume by means of increasing or decreasing its amplitude.
	Fade In	Use it to increase the sound volume gradually.
	Fade Out	Use it to decrease the sound volume gradually.
	Silence	Use it to mute the sound of an audio track.
	Invert wave	Use it to invert the sound around the horizontal axis.
	Normalize audio	Use it to increase or decrease the sound to the selected volume level.
Delay	Flanger	Use it to add an echo to the audio by means of changing the frequency of the repeated sound.
	Chorus	Use it to make the audio sound fuller.
	Delay	Use it to create the sound of a repeating, decaying echo.
	Phaser	Use it to add an echo to the audio by means of changing the phase of the repeated sound.
	Vibrato	Use it to create an effect of pulsating sound
	Reverb	Use it to simulate the acoustical effect of rooms and enclosed buildings.
Filters	Low Pass	Use it to correct various imperfections in the original audio. It attenuates frequencies above the cutoff frequency.
	High Shelf	Use it for boosting or suppressing high frequencies of sound.
	Peaking EQ	Use it to provide a boost or cut in the vicinity of some center frequency.
	Equalize	Use it to adjust sound settings more accurately.
	Median	Use it to eliminate impulse noise such as unwanted frequent sharp sounds.
	Gate	Use it to recognize steady noise sources and remove them from the audio track.
	Wah Wah	Use it to extend expressiveness, sounding much like a human voice saying the syllable wah. It modifies the vowel quality of a tone.



Time stretch/	Tempo change	Use it to change the tempo keeping the pitch the same throughout the audio file.
Pitch shift	Rate change	Use it to changes the speed and tone of the sound.
	Pitch shift	Use it to change the sound pitch (tone) without changing
		its tempo.
Special	Reverse	Use it to produce an effect similar to backward playback.



Applying text effects

VSDC includes several animated text effects that can help you get full control of how text symbols appear in the scene.

- 1. Start a new project, select the "T" icon from the left-side menu and choose Text.
- 2. In the pop-up window click **OK** to proceed.
- 3. Place the crosshair rectangle where you want the text object to be located. You'll be able to relocate it any time.
- 4. Double-click inside the rectangle-shaped frame and you'll see a cursor.
- 5. Type your text.
- 6. Then click on the text file on the timeline, go to the "Text effects" menu

The selected effect will appear on the Timeline area as an object. It represents a colored block that occupies a single line and is located on a separate tab on the Timeline. In the table below, you will find all the video effects available in the program and their brief description.

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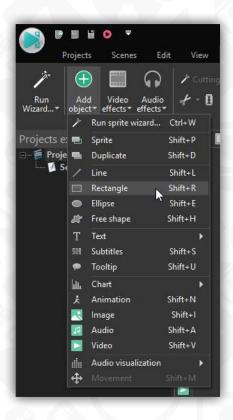
List of available effects

Effect	Description	
Recoloring	Use it to change the color or the level of opacity of text symbols.	
Shift position	Use it to make text symbols move from one location to another on the screen.	
GlyphFX	Use it to change the appearance attributes of text symbols, such as their size, skew angle, or rotation.	
Scrolling text	Use it to add a scroll effect to the text, set the movement direction, adjust the angle and speed.	



Adding objects

While creating your movie, you may need to add an object such as text, image, chat, geometric shape, etc.



- 1. Open the scene where you want to insert an object.
- 2. Open the **Editor** tab and click the **Add object** button to select an appropriate object from the drop down list. You can also use the **Objects tools** toolbar at the left of the **Scene area**. As an example, we select a **Rectangle** object. After that, you will be able to set the object position respectively to the media file in the **Object position settings** window. You can leave the default settings clicking the **Ok** button and change them any time later.
- Place the cursor to the **Scene area**, it becomes a crosshair, click and stretch to determine the object size.
- 4. The selected object will also appear on the **Timeline area**. It represents a colored block that occupies a single line and is located on a separate tab on the **Timeline**.
- 5. Each object has a few common and several individual settings that you can change within a **Properties** window. To change its position on the screen, adjust the **Left** and **Top** values in the **Coordinates** field or click the object on the **Scene area** and



move it to the right location. To correct its size, adjust the **Width and Height** values in the **Coordinates** field or move its boundaries directly on the screen. You can also select the object style, contour thickness and color, background type and color.

6. Finally, change the object position and duration on the **Timeline** if you need that it affects only a particular moment in your movie. Please refer to the fourth point of the **Applying video effects** section to learn how to do it.





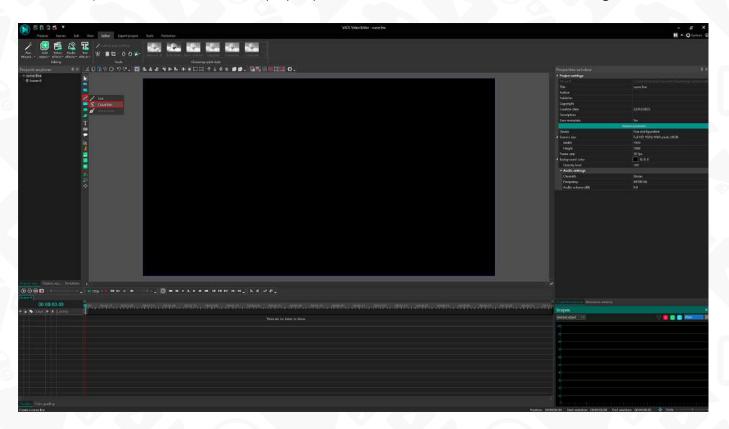
Adding curve line

You can use curve lines in your videos to outline objects, underline text, and even create beautiful animations. In this tutorial, we'll walk you through the following:

- How to create a curve line in a video
- How to fill a curve line with a gradient
- How to use a curve line as a movement trajectory
- How to wrap text around a curve line
- How to make a curve line move in a video

How to add a curve line to the scene

To get started, create a new project and select **Curve line** from the toolbar (at the top or on the left). Then click OK in the pop-up window to confirm the default settings.

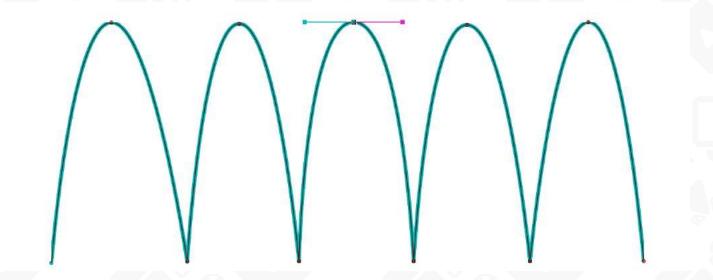


Like free shapes, curve lines consist of control points and splines. To start drawing the line, place two or more control points on the scene with mouse clicks.





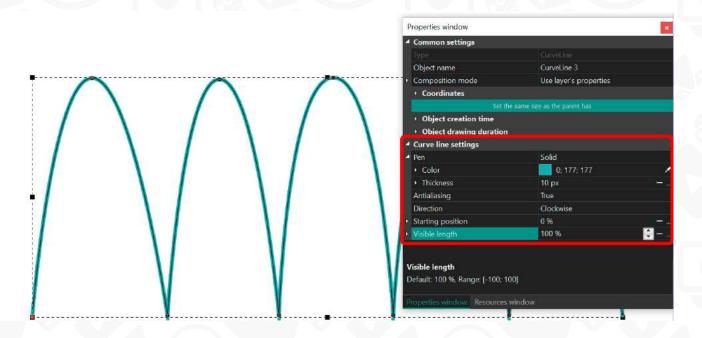
To turn straight lines into smooth splines, select any control point, press and hold the Ctrl key and start dragging the point to the side. Two vectors will appear from the control point: red and green. Use them to continue fine-tuning the shape of the curve line until you achieve the desired look.



In the following sections, we'll talk about curve line settings, and show you how to turn a curve line into a beautiful graphic object or animation.

To access the settings menu, double-click on the curve line layer and head over to the **Properties window**. There are two groups of settings available: Common settings and Curve line settings.





Common settings allow you to rename the object on the timeline, set up the exact time when the curve line will appear on the screen, and define how long it will remain in the video. You can also use this group of settings to adjust the position coordinates of the curve line on the screen.

Curve line settings allow you to set the thickness and the color of the line, choose fill type, create animation, and customize the object.

Let's review the parameters from this group one by one.

Curve line settings

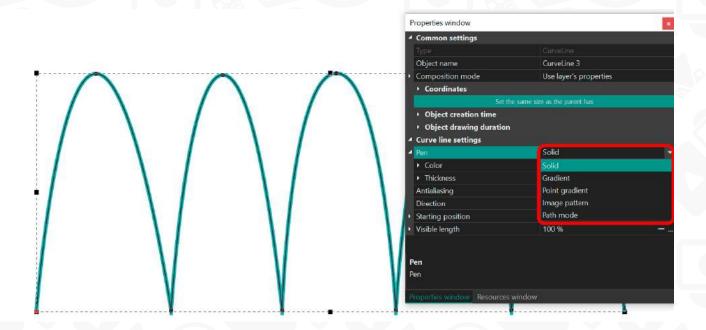
The first group of parameters allows you to adjust the basic characteristics of the curve line: its color, thickness, and fill type.

Pen

There are 5 fill types available under the **Pen** menu:

- Solid
- Gradient
- Point gradient
- Image pattern
- Path mode

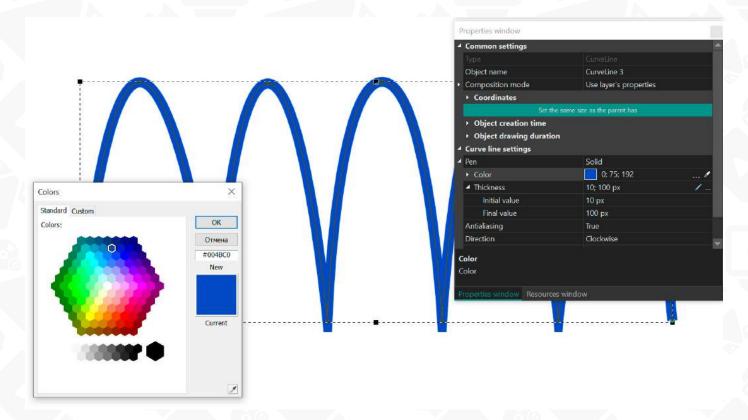




Depending on the selected mode, you'll be able to set up additional parameters. Let's walk you through the settings of each mode.

Solid

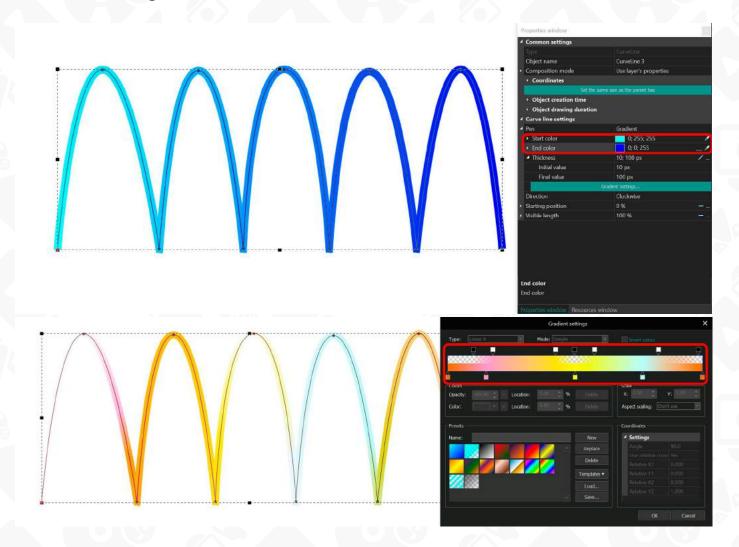
Solid means solid color fill of the curve line. In this mode, you can select the fill color and the thickness of the line. Note that you can set the difference between the Initial and Final values, which means that the line will be getting thicker or thinner during the playback.





Gradient

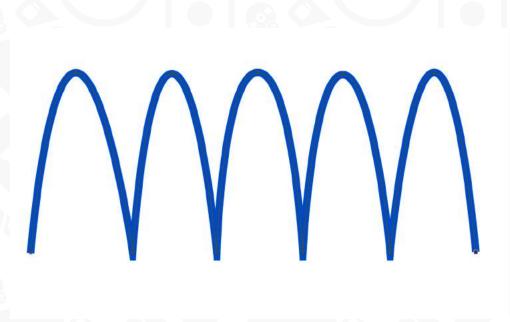
Gradient mode creates a simple gradient fill between the first and the last points. For this mode, you can either select two colors or use one of the patterns from the **Gradient settings** menu.

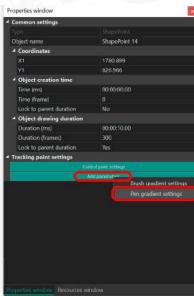


Point gradient

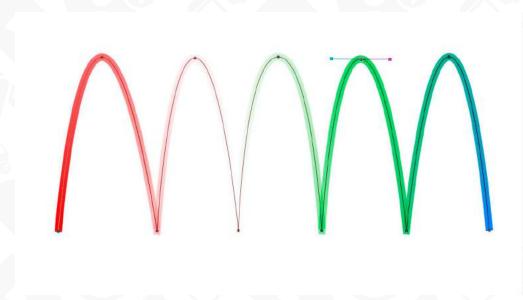
The next mode is called **Point gradient**, and it creates a multicolor gradient fill by assigning individual colors to each control point.

In this mode, you need to select the desired control point, then click **Add parameters**, and proceed to **Pen gradient settings**.





From there, you can pick a color for the control point, adjust its **weight** (the spread of the color assigned to the point) and the **opacity** of the adjacent area.



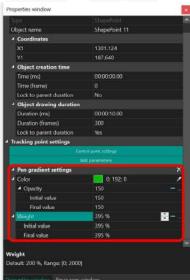
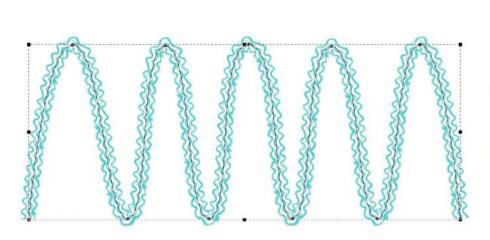
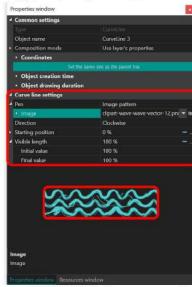


Image pattern

The **Image pattern** mode allows you to import an image to the program and use it as a pattern to fill the curve line. We recommend using small PNG images with transparent backgrounds, however, it's not a requirement. This is what the result looks like:







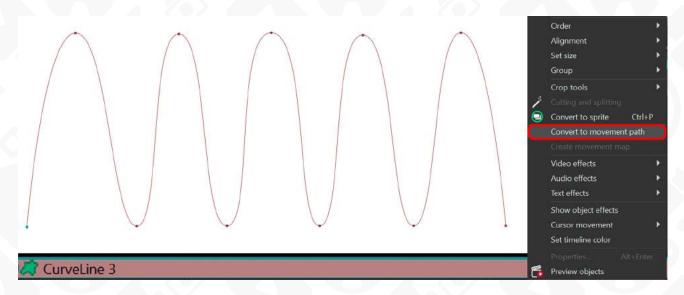
In this mode, you can also adjust the starting position and the visible length of the pattern. If you start changing these parameters, the image pattern will be disappearing from the start of the curve line or its end accordingly.

Path mode

Finally, the **Path mode** is designed to turn curve lines into movement paths. If you select this mode, the curve line will be invisible on the scene and serve as a trajectory for a moving object.

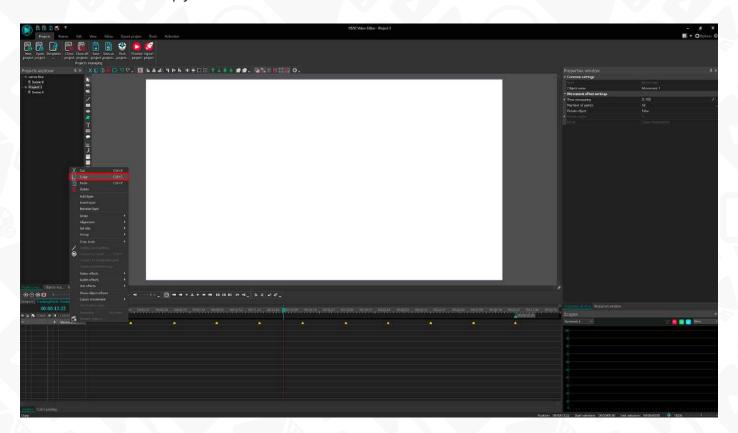
Here is how to use this mode.

Go back to the main timeline tab and make a right mouse-click on the curve line, then select **Convert to movement path**. In the conversion pop-up window click OK to confirm the default settings.





Once you convert the curve line into a movement path, select the **Movement** layer on the timeline and copy it:



Then go back to the main timeline tab and import or create the object you want to animate. For our example, we'll be using a small image. Make a double-click on that object and paste the movement layer to the timeline.

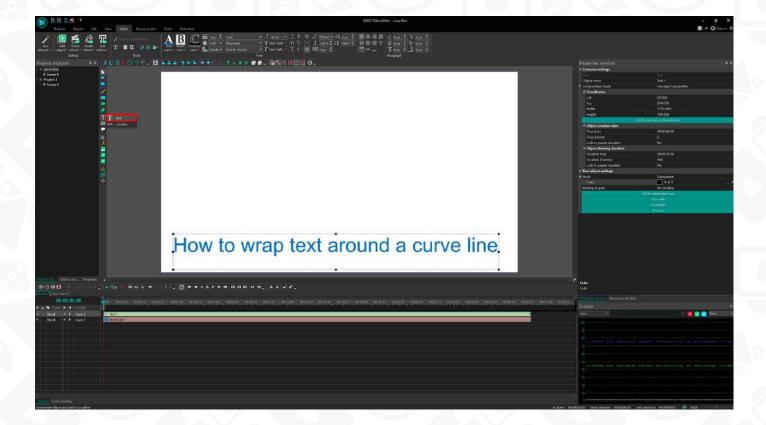
Note that if you go back to the curve line settings, you can adjust the parameters named **Starting position** and **Visible length**. They define the point from the start of the line where the object starts moving and the point before the end of the line where the object stops. For example, if you set Starting point at 25%, the object will start moving 25% down the line; if you set Visible length at 25%, the object will stop moving 25% before the end of the line.

How to wrap text around a curve line

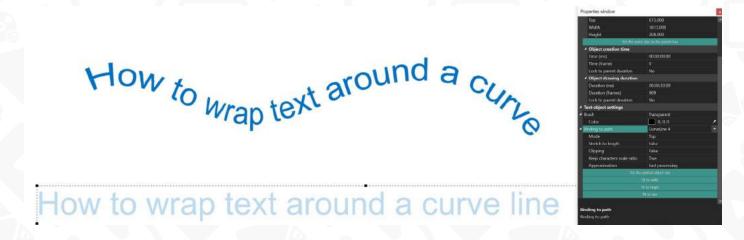
The Path mode also allows for wrapping text around the curve line while maintaining the line invisible. Here is how it works.

Make sure you've selected **Path mode** in the dropdown menu first, then go back to the main timeline tab and add a text object.





Make a double-click on the text object and go to the Properties window; open **Binding to path** options and select the curve line you created earlier. Your text will adjust accordingly:



Note that the original text object is only visible in the editing mode. As soon as you activate the playback, it will disappear.

There are a couple more parameters you can use to adjust the appearance of the wrapped text:

• **Mode** enables you to position the text above, in the center, or below the curve line, or attach it to an additional curve line. Please note that if you choose the last



option, you must add a second line to the scene beforehand for the editor to display it in the additional **Stretch to path** menu. Depending on the chosen mode for the first line, **"From first curve path"** or **"From second curve path,"** the **second line will serve as either the bottom or top of the text**.

- **Stretch to length** allows you to stretch the text to the length of the line or keep the original length.
- Clipping allows you to create a clipping mask using the original text object frame.
- Approximation allows you to smooth text curves.

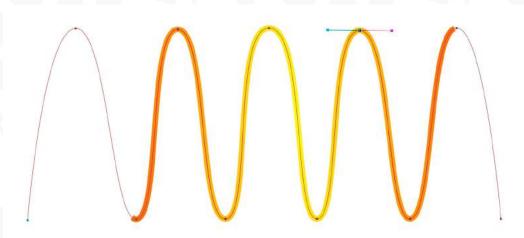
How to animate curve lines

In the last section of this tutorial, we'll show you how to animate curve lines. To do that, you'll be using three parameters:

- Direction (clockwise or counterclockwise)
- Starting position
- Visible length

Let's start with the basic concepts.

Starting position defines the point on the line where the fill starts being visible. **Visible length** defines the percentage of the line that is visible. For example, if you set 20% for the former and 70% for the latter, the gradient fill will **not** cover the first 20% and the last 30% of the line:





If you leave these settings as is, the curve line will remain still. However, if you expand the menus and set the **Initial** and **Final** values, you can create animation. For example, if you set the Initial value for Starting position at 0% and the Final value for Starting



position at 50%, the fill will be slowly disappearing during the playback.

You'll get a similar result if you set the following parameters for Visible length:

Initial value: 100%Final value: 0%

The only difference is that the fill will be disappearing from the end of the curve line.

Finally, you can play around with the settings and select the desired values for both parameters. For example, you can create an effect of a moving line by setting the Visible length at 10% and the Starting point at 0;100%.

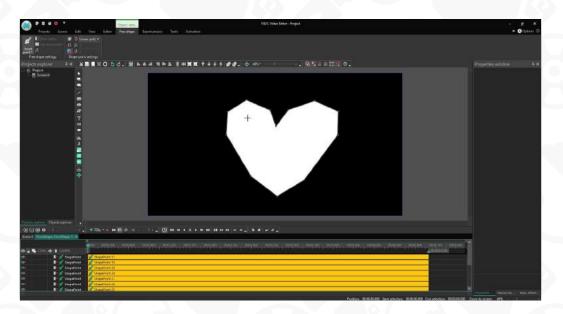
Note that if your curve line is closed, the movement will continue for as long as the curve line object is visible on the screen.



Adding free shape

You can draw simple customized images for greeting cards or home movies, such as stars, snowflakes, hearts and many others.

- 1. Select the **Add free shape** option from the **Add object** drop down menu on the. **Editor** tab or use the corresponding button on the **Objects tools** toolbar.
- 2. You will see five options available. **Free shape** lets you create a group of control points and draw a shape from the start point. **Insert point** helps you add a point to the group. **Start new path** allows you to start a shape from a starting point in a group. **Start new shape** allows you to cut a shape from a starting point in a group. And the **From gallery** option contains pre-made shape templates.



- 3. Click on **Free shape**, drag the cursor to the scene and click there to create the first control point. By default, the editor uses a **Bezier curve**, so if you keep pressing the mouse button, you'll get two symmetrical vectors that will be the foundation of the curve. To make them asymmetrical, press the **Ctrl key**, then drag one vector in the desired direction and release the mouse button.
- 4. If you create a new control point while keeping the mouse button pressed, you'll see a new vector generated based on the positions of the previous two control points. Meanwhile the first and the last control points will be connected with a straight line and the space between them will be painted white.
- 5. To finish the shape. Click on the second control point, press the **Ctrl key** and drag the vector so that it's placed parallel to the previous one. To close the shape, you need to either hold the **Ctrl key** and click on the first control point, or click on the first



control point first and then hit Closed free shape in the Shape points settings.

- 6. If you need to change a vector of any control point, just click on it and drag the vector in the desired direction. If you need to create a vector with different, asymmetric directions, remember to press Ctrl key while dragging the vector.
- To adjust the shape, click the point you want to change, then you can easily delete it or drag to modify the size of the shape.
- 8. Using the settings available in the **Properties window** under **Free Shape Settings**, you can fill the shape with color or change the outline color using the **Pen** and **Brush** tools respectively.
- 9. If you want to set a **gradient** for your free shape, you need to double-click on its block on the timeline, select the desired point and click the **Add parameter** option in the **Properties Window**. Then proceed to **Pen gradient settings** or **Brush gradient settings**. These parameters have the same settings, to learn more about them, see "Point Gradient of a curve line".
- 10. You can use free shape outlines as a designated trajectory for tracking points. Just go back to the main timeline tab, right click on the free shape and select Convert to Movement Path. As a result, a new Tracking Point block will appear on the timeline, containing all the key points of the shape you created. You can assign a color value for this tracking point to pass along as it's moving along its trajectory. These settings will also be available in the properties window under Tracking point settings >> Add parameters.



Adding text

When you need to insert some text information: a couple of words to title your film or several sentences to comment a scene, you can use one of the following options:



Method 1

- Select the **Text** option from the **Add object** drop down menu on the **Editor** tab or use the corresponding button on the **Objects tools** toolbar.
- 2. Place the cursor to the **Scene area**, it becomes a crosshair, click and start typing your text. The text area will automatically change its size according to the entered text.

Method 2

- 1. Select the **Text** option from the **Add object** drop down menu on the **Editor** tab or use the corresponding button on the **Objects tools** toolbar.
- 2. Place the cursor to the **Scene area**, it becomes a crosshair, click and stretch to determine the text area. Now you can enter your text.

Once the necessary text is typed, you can adjust its parameters according to your needs. All the standard editing features are at your disposal on the **Editor** tab or within the **Properties** window.

Select your text or just a part of it with a mouse and change its color, font, font size, font style. You can underline or cross out your text, use caps and scripts, change horizontal and vertical scale, select an appropriate alignment variant, specify other paragraph settings.





You can outline your text and adjust its thickness, style and dash style if necessary. You can make any word or letter transparent. To do that select the necessary symbols with the mouse, open the Text color drop-down list and move the **Opacity** slider.

You can change the orientation of the text to from right to left what's more important for those who use the Arabic, Aramaic, Azeri, Dhivehi/Maldivian, Hebrew, Kurdish (Sorani), Persian/Farsi and Urdu languages.

For text objects containing long-form copy make use of vertical and horizontal scrolling, so it's more convenient to make text edits right on the scene.

If you want to bend the text or make it match the shape of a specific object in the scene, use the **Binding to Path** option (see How to wrap text around a curve line).

To apply changes to the whole text, activate the text area, so that it is surrounded by black squares. You can also change the location of the text area on the scene, just activate it and move to the necessary direction.



Adding subtitles

If you need to add subtitles to your film, please follow these easy steps.

- 1. Select the **Subtitles** option from the **Add object** drop down menu on the **Editor** tab or use the corresponding button on the **Objects tools** toolbar.
- 2. Brows for the appropriate .srt file on your computer disc drive or other storage device and click the **Open** button.
- 3. Define the location within the **Object position settings** window or leave the default settings clicking the **Ok** button. You can change them any time later directly on the **Timeline area**.
- 4. Place the cursor to the **Scene area**, it becomes a crosshair, click and stretch to determine an appropriate area.
- 5. Change the available parameters within the **Properties window.**

If you don't have the .srt file ready, you can create subtitles right in the program. Just hit the **CC** button on the left, select **Cancel** when the program suggests uploading a file, and hit OK in the **Object position settings** window. Then manually select the place for subtitles on the scene and hit **Edit subtitles**.

From there, you'll need to manually add subtitles, phrase by phrase, using the following format:

1 00:00:06,107 --> 00:00:08,534 Subtitle text 2 00:00:10,234 --> 00:00:18,530 Subtitle text

The first line indicates the subtitle order number. The second line contains the exact moments when the subtitle appears on the screen and disappears from it. The third line contains the actual text of the subtitle. Keep in mind that if you decide to prepare a transcript file in advance, you'll have to follow the same format.



Adding tooltips

While creating an educational or training video you can add some tooltips.

- 1. Select the **Tooltips** option from the **Add object** drop down menu on the **Editor** tab or use the corresponding button on the **Objects tools** toolbar.
- 2. Define the location within the **Object position settings** window or leave the default settings clicking the **Ok** button. You can change them any time later directly on the **Timeline area**.
- 3. Place the cursor to the **Scene area**, it becomes a crosshair, click and stretch to determine the tooltip area.
- 4. Find the **Text** line of the **Text object setting** section of the **Properties window** and click the button with three dots. Enter your text within the opened window.
- 5. Change the tooltip style selecting its direction and color on the Editor tab. All the available settings are at your disposal in the **Properties window**.





Adding a counter

The **Counter** is an object that inserts a timer to your video. You can set any time period from days to seconds or even frames.



- Open the Add object drop down menu on the Editor tab and select Counter option from the Text section. You can also select this option clicking the Text button on the Objects tools toolbar.
- 2. Define the location within the **Object position settings** window or leave the default settings clicking the **Ok** button. You can change them any time later directly on the Timeline area.
- 3. Place the cursor to the **Scene area**, it becomes a crosshair, click and stretch to determine the object position on the screen.
- 4. Change the available Counter object settings within the Properties window. To make the timer reverse, switch 'False' to 'True' in the Playing backwards field, increase or decrease the Speed value, set the Counter offset to indicate the timer start different from that of the video, select an appropriate Pattern in the corresponding field. If needed, set a delayed timer start or change the finish time using the Delay start (ms) and Early finish (ms) options.
- 5. Customize the look of your timer using the text editing settings on the **Editor** tab above.



Adding a chart

While creating a video presentation or a business slideshow you may need to compare or analyze some information. Use the Chat feature of the program to provide the data.



- Select the Chart option from the Add object drop down menu on the Editor tab or use the corresponding button on the Objects tools toolbar.
- 2. Define the location within the **Object position settings** window or leave the default settings clicking the **Ok** button. You can change them any time later directly on the **Timeline area**.
- 3. Double click the **Chart** object on the **Timeline** to open the Diagram properties and change them in the **Properties window**. One **chart** can contain several diagrams. To add one more diagram, click the **Chart** button on the **Objects tools** toolbar and select the **Diagram** option from the drop down menu.
- 4. Enter your own data. Double click the **Diagram** object on the **Timeline**. The **Series** object will appear. In the **Properties window** specify **Argument, Value and Color**, add a text legend for each **Point**.
- 5. Customize the graph according to your needs. Click the **Style** line and select the graph style from the drop down menu. The available styles are Bar, Point, Bubble, Line, Pie, Gantt, Pyramid, Area and others.



Creating an animation

To create an **Animation** object, please follow these easy steps.

- Select the **Animation** object option from the **Add object** drop-down menu on the **Editor** tab or use the corresponding button on the **Objects tools** toolbar.
- 2. Define the location within the **Object position settings** window or leave the default settings clicking the **Ok** button. You can change them any time later directly on the **Timeline area**.
- 3. Open an additional **Animation resource** window click the **Edit animation object** button in the bottom of the **Properties window**.
- 4. Click the **Add images or Insert images** button to load necessary files. Use the corresponding buttons to delete unnecessary pictures, move them up/down or top/bottom. Select the **Frame type**, increase the **Duration** of each frame and set the **Resize mode** within the **Properties window**.
- 5. Click **Ok** and preview the result.
- 6. Change the position of the **Animation** object on the **Timeline** moving the violet block to the left or to the right.





Adding Audio Visualization Spectrum

- 1. Click the **Audio Visualization** object option from the **Add object** drop-down menu on the **Editor** tab or use the corresponding button on the **Objects tools** toolbar and select **Spectrum**.
- 2. If you use an external soundtrack located on your PC, browse the needed file in the explorer. In case you want to visualize a track you have added to the scene, close the pop-up explorer. Place the spectrum on the scene using a mouse.
- 3. In the second case, scroll down **Properties Window** and select **Objects on scene** in the **Audio source** field. Choose a required file.
- 4. To modify the spectrum, adjust the spectrum type by choosing between gradiented peaks, dashes, lines, and lines with blur. The color theme can be changed by clicking on the ... icon (Advanced settings) or the eyedropper tool in front of each color.



Abstraction

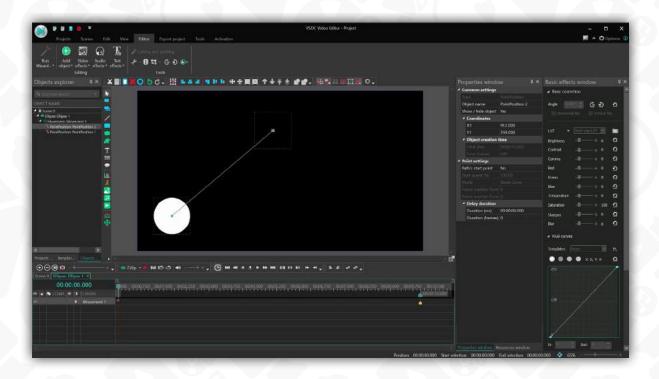
- Follow the same steps as listed before but select the Audio Abstraction option in the Audio Visualization object.
- 2. Hundreds of presets are available in the **Audio abstraction object settings** field of Properties Window. They are divided into several groups: Aderrasi, Flexi, Geiss, Goody, Hexcollie, Martin, Orb, Stahlregen, Eo.S, Fishbrain, Phat, Rovastar, Shifter, Unchained, Zylot and Other.



Creating moving objects

If you need to add a moving object — a piece of text, an image, a shape or even a video — to the scene, you can use the **Movement** feature.

- 1. First, add an object to the scene using the **Add object** menu at the top or the corresponding button from the **Object tools** toolbar.
- 2. Make a double click on the object. Go to the left-side menu and select the button named "Add movement" or use the **Shift + M** hotkey combination.
- Confirm the movement effect position within the pop-up **Object position settings**window or adjust it to your goals. Keep in mind that you can change the effect
 position later, directly on the **Timeline**.



A control point in the center of the object is called "control point" and it marks the starting position in the movement trajectory.

4. Decide where on the scene the object should move and make a mouse click there to create a second point. This one and all the subsequent points are called "passing points". The path between these control point and the first passing point is your first movement vector. If you need to move any of these points, hover over it until the cursor starts looking like a white cross. Then grab the point and drag it wherever you need. To add another movement vector, go back to the left-side menu and select the Movement button again. Then click anywhere on the scene to draw a new path.



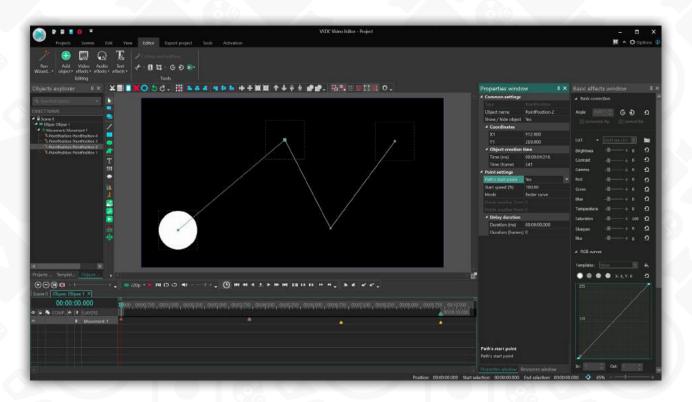
Repeat as many times as needed to finish the trajectory.

5. If you want to adjust the movement speed through any particular vector, you'll need to select that vector by making points on both ends of it "control points". To do so, select the first point of the vector and go to the Properties window on the right-side. Find **Point settings** and switch to "Yes" in front of **Path's start point**. Do the same for the second control point on the other end of the vector.

Once you've selected the desired vector, go to the Properties window and adjust the **Start speed %** value to your needs.

If you want to make the moving object rotate while moving through the selected vector, select that vector, go to the **Properties window -> Rotate object** and switch to "True". This will activate the rotation settings menu.

6. To set rotation, find the **Rotate angles** field and switch "Constant parameter value" to "Linear parameter change". Then set desired rotation angle values for the beginning and the end of the movement.



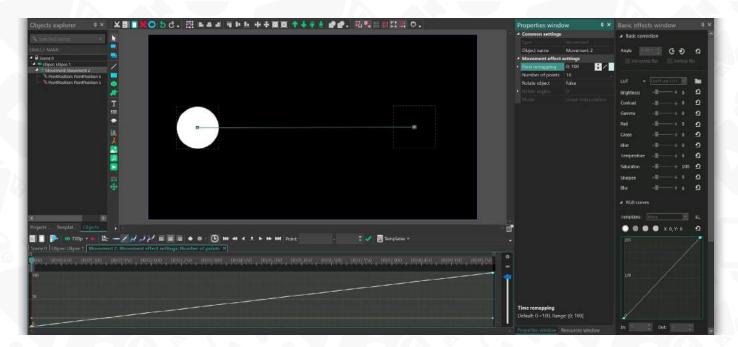


Time remapping

Time remapping allows you to slow down, speed up, or reverse object movement for a selected part of its movement path. You can apply it to an image, shape, title, icon, or any other 3rd-party moving object added to the scene.

If you don't know how to make an object move in a video, please read the chapter named "Creating moving objects" above.

Once you've created a movement path, right mouse-click the movement layer on the timeline and select Properties. In the Properties window, find **Time remapping**, and hit the 3-dot icon to access the remapping graph.



This graph illustrates object movement over time, and the two axes define two different aspects of it.

The X axis reflects the duration of the movement effect: the left part of the timeline is the beginning of it, and the right part is the end. The Y axis reflects the object's movement path: the bottom part of the timeline is the beginning of the path, and the top part is the end.

By modifying the graph, you can modify the object movement progress. For example, you can make the object go slower or faster through certain parts of the path, or even send it in the opposite direction. All it takes is a couple of keyframes placed in the right spots.

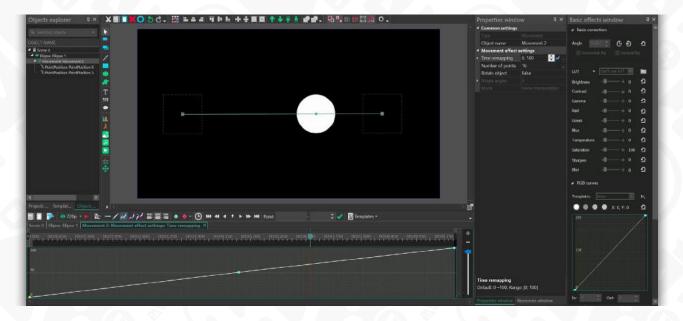


Understanding keyframes and the Y axis

Keyframes are control points that allow you to break the graph – and therefore, the movement path – into sections so that you can work with each section independently. You either create keyframes manually by double-clicking the graph or use the graph templates from the menu. For this tutorial, we'll use the former option.

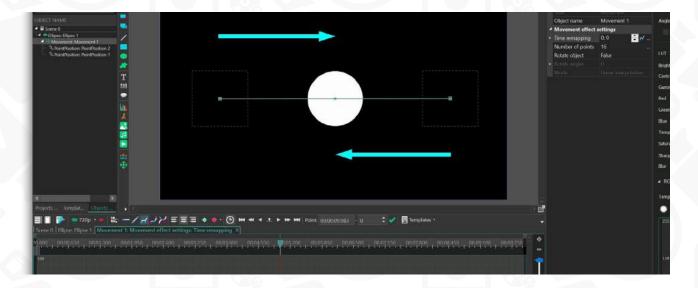
Notice that the first keyframe (Y:0) indicates the initial object position on the path. The last keyframe (Y:100) is the end of the path.

As long as the graph is continuously ascending from 0 to 100, the object will be moving from point A to point B along the movement vector you created.



The Y axis indicates the time flow for the object. And if you want the object to go halfway through the movement vector and then go back to the initial point, at the same speed, all you need to do is create a keyframe in the middle of the graph and drag the last keyframe from 100 to 0. This way, according to the Y axis, the start and the end of the movement path will be the same.

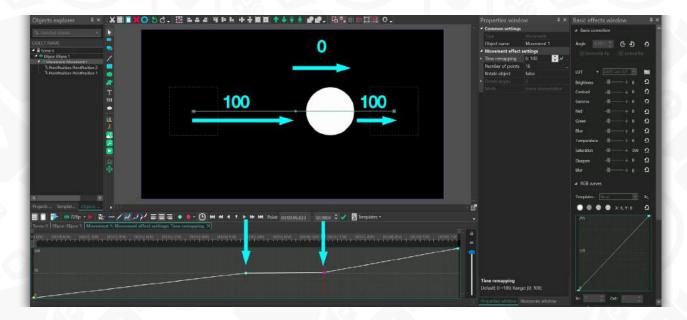




Here is another way to look at it. If the angle between two subsequent keyframes is greater than zero degrees, the object's time flow in this section goes in the original direction. However, if the angle between two subsequent frames is less than 0 degrees, the object's time flow goes in the reversed direction.

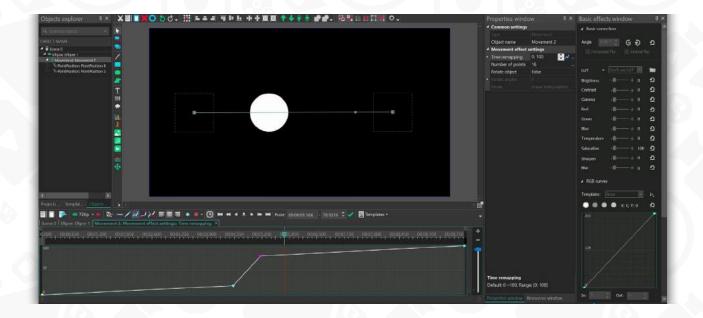
Understanding the X axis

The X axis allows you to tweak movement speed at any given point in time. For example, if you want the object to slow down for a second somewhere in the middle of the way, create a segment using keyframes and make it flatter than the rest of the graph.



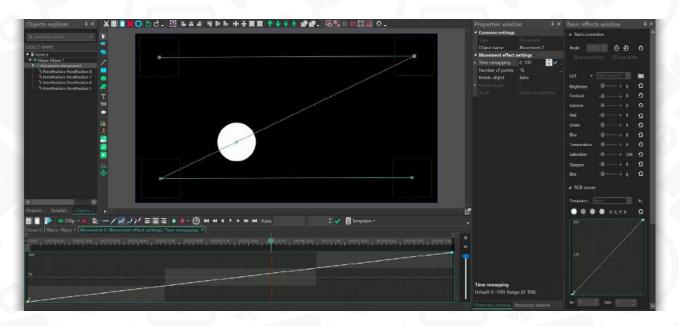
Similarly, if you want the object to briefly speed up, create a 2-keyframe segment and make its angle greater than the rest of the graph.





Time remapping for a multi-vector movement path

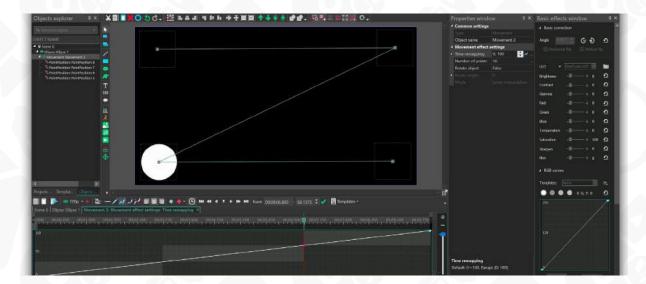
If you've created a movement path consisting of multiple vectors, on the time remapping graph, each vector will be represented by a light-gray rectangle. The purpose of these rectangles is to help you visualize the position of each vector in time and create keyframes accordingly.



The general approach to multi-vector movement paths is no different from what we've described above. However, if you decide to change any vector position in the scene, the gray rectangles will shift accordingly. The tricky part is that if you've already created keyframes on the graph based on those movement vectors, you'll have to manually shift them too.



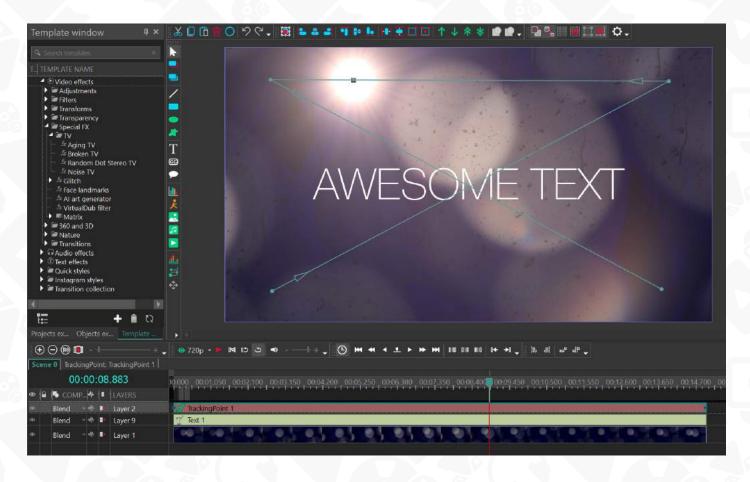
Keyframes aren't attached to movement vectors. So, if you want the object to move through a certain vector with a certain speed, and you're moving that vector around, make sure to double-check the keyframes.





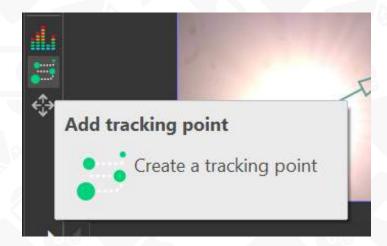
Tracking point animation

When working with coordinate-based effects, such as Lens flare or God rays, you can use the point movement tracking feature for animation. This means that you'll be able to manually create a movement trajectory for the effect to follow and create custom animations.



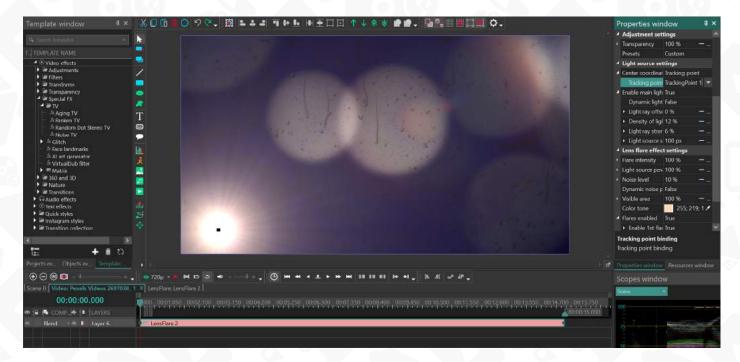
Here's how it works:

1. Add a **tracking point** to the scene using the corresponding button on the left-side toolbar.





- Double-click on its block on the timeline and create a movement vector using the <u>"Movement"</u> button on the left-side toolbar or attach a movement map created with the <u>Motion tracking</u> feature.
- 3. Once the movement path is ready, go to the main timeline tab and apply any of the coordinate-based effects to your main video or image. For this tutorial, we'll use the **Lens flare** effect.
- To apply the effect, select an image or a video on the timeline, go to Video effects -Nature - Lens Flare.
- 5. Make a right mouse-click on the effect layer and select Properties from the context menu. The **Properties window** will slide-in from the right-hand side.
- Find Center coordinate type among properties and select Tracking point. Then open the Binding with point dropdown menu below and select your tracking point.



Below is a list of effects that support tracking point animation – along with the names of their properties that allow for binding with the tracking point.



Name of effect	Parameter in the properties window Initial glyph position Center coordinate type	
Text shift position		
Motion blur Lens Flare Bokeh glare God rays Shattered glass		
Shadow	Shadow coordinate type	
Distort: Polar Fish eye Lens Z-drop Polar Coordinates	Center coordinate type, Inner/Outer coordinates.	



Rotating objects

VSDC offers two options for video and object rotation:

- 90-degree clockwise and counterclockwise rotation
- Custom-angle rotation

Depending on your editing workflow, there are three ways you can access the rotation settings.

Method 1

Select the video or object you want to rotate and head over to the **Cutting & splitting** menu at the top or the **Basic effects window** on the right. Use the corresponding **Rotate** button to quickly rotate the object 90 degrees clockwise or counterclockwise.

Method 2

You can rotate objects manually right on the scene using a mouse. To adjust the angle, you can use the **Basic effects window** as well.

Method 3

Finally, you can apply the rotation effect and use advanced settings to customize it. To do that, go to **Video Effects -> Transforms -> Rotate**. Using the Properties window, you'll be able to set the rotation angle and the way it will be changing over time, define the effect duration, and shift the center of rotation.



Using blending modes

Blending Modes help you achieve unique visual effects through overlaying multiple objects in the scene and mixing them in a creative way. For example, you can use various color tone inclusion and exclusion modes, adjust the level of transparency, create a double exposure effect, or a ghost effect.



To help you get started with this tool, we'll explain how to recreate the artistic multi-layer effect consisting of several copies of the same video (see the example below)

- 1. Click your video with a right mouse button and select Duplicate. Make sure the copy is of the same size as the original file by selecting the copy and using the following option in the Properties window: **Set the same size as the parent has.**
- 2. Double click the duplicated object and add a **Rectangle shape** to the scene using the menu on the left side.
- 3. Hover over the scene, and when the cursor becomes a crosshair, use it to stretch the rectangle to the size of the video. In the menu at the top, select the third type of a rectangle: filled without frame.
- 4. Change the color of the rectangle using the **Brush** menu in the **Properties** window. Click the three-dot button to open the color selection and choose anything to your taste.
- 5. Go back to the timeline, open the **Blending modes** menu, and select **Overlay**.
- 6. To make the effect look more impressive, create more color layers by duplicating the one you've just created. Go to the main timeline tab and duplicate the blended layer. Double-click the new copy and change the color of the rectangle. For best results, use contrasting colors for different layers and increase the Opacity value. Feel free to experiment with modes, shapes, and colors.



7. Finally, shift the layers you've created right on the scene by dragging and dropping them with a mouse. Remember to use the **Preview** feature to see the result before exporting the video.





Using motion tracking

Motion tracking enables you to attach any objects – for example, masks, titles, or images – to any moving element in a video.

To get started with motion tracking in VSDC, decide which object's movements in the video you want to track. Then, based on its trajectory, you need to create a movement map. Here is how to do it:

- Launch the program and import a video file with a moving object using the Add object dropdown menu on the **Editor** tab or using the corresponding button on the **Objects tools** toolbar.
- 2. Make a right click on the video and select "**Create movement map**" from the context menu.



- 3. Select (or confirm) the folder on your PC to store the map. Hit "Save".
- 4. In the preview window, you'll see a frame defining the tracked object. Resize and move it to ensure that the tracked object fits the frame and takes most of its space.
- 5. Use the "**Start analysis**" button in the **Motion tracker** menu at the top to launch the tracking process.
- 6. As the playback progresses, the movement map will be gradually appearing in the preview window, drawn in green. At the end of the video, check the trajectory and



if it's accurate, click the **Apply editing** button. This way, the movement map will be saved to your PC and VSDC will automatically switch to the regular video editing mode.

How to correct the movement map if the tracking object has been lost

The software may "lose" the tracked object in the process if it gets overlapped by the surroundings and stops being visible in the scene or changes its size, color, shape, or appearance completely.

Button	Icon	Description
Step backward	K	Trajectory adjustment in the previous frame
Analyze backward	\	Backward trajectory adjustment, from the cursor to the beginning of the video
Analyze forward	>	Forward trajectory adjustment, from the cursor to the end of the video
Step forward	K	Trajectory adjustment in the following frame
Add keyframe	\bigcirc	Use it to add keyframe for changing region and modes
Invalidate area	>>	Use it to define a part of the trajectory as an incorrectly tracked region.

To edit the movement map or to find a tracking loss region, you'll need to manually add keyframes to the required areas using the buttons bellow:

Here is how it's done:

- 1. Place the cursor at the moment when the program loses the object or when you want to change the trajectory. Adjust and relocate the tracking frame according to the new object's position.
- 2. Select the way you want to relaunch tracking for the loss region. You have 4 options to choose from: **Step backward, Analyze backward, Analyze forward, Step forward**.





- 3. By clicking the "**Continue analysis**" button, you will launch the tracking process according to the option selected in the previous step. If the object gets "lost" more than once during the playback, repeat these steps for each time.
- 4. To select a piece of the trajectory on the movement map to delete it, place keyframes at the beginning and at the end of the piece you want to cut out, then select it and hit "**Delete**".
- 5. To modify the tracking loss region with more precision, place additional keyframes to specify the tracking loss region on the timeline.
- 6. Make a double-click on the resulting piece of the map.
- 7. Use the icon named "**Invalidate area**" to define the piece as a region where the object's movement was tracked incorrectly.
- Finally, make manual adjustments using keyframes. To switch between keyframes, use the "right" and "left" arrow keys on your keyboard.

Try various motion tracking algorithms for better results



Tracking object movements can be tricky, especially when the object disappears from sight or moves chaotically. This is why VSDC includes multiple motion tracking algorithms designed for different scenarios. If the default settings fail to deliver, feel free to try other options available in the dropdown menu:



Multi-surf – the default motion tracking algorithm created by the VSDC developers. It is considered one of the best motion tracking algorithms. However, it may struggle with tracking an object that changes its scale while moving.

DCF-CSR (Discriminative Correlation Filter with Channel and Spatial Reliability) – the second best option for tracking object movements in a video. Use it when Multi-surf doesn't do a good job.

Median – this algorithm provides high-quality tracking when the movements are slow and predictable. However, it may fail if the tracked object moves rapidly and chaotically.

KCF (Kernelized Correlation Filters) – this is the best mode if the tracked object constantly disappears from the scene. However, it won't be able to track an object that changes its size during the video.

TLD (Tracking, Learning and Detection) – this algorithm will work well for videos where the tracked object's scale is changing. It is also the best choice for continuous motion tracking even if the object briefly disappears out of sight.

Of course, that doesn't mean you should be randomly switching between motion tracking algorithms for any minor issue. If the motion tracking results don't meet your expectations, try adjusting the tracking frame first. Often, a poorly placed tracking frame is the main reason for the object being "lost" by the software. If frame adjustments don't help, try switching to DCF-CSR. If the result is dissatisfactory, and the tracked object is changing its scale in the video, select Median or TLD.

Apart from the tracking algorithm, you can also specify which area of the tracking frame contains the key part of the tracked object. By doing that, you help the algorithm build a more precise path. For example, if you select "Center" in the "Tracking frame area" field, the motion path will be drawn based on the movements of the center of the frame.







The "**Lost frames**" option will help you to determine the number of lost frames while tracking is working. Once the movement map is ready, you need to assign it to any object: an image, an icon, a title, or a mask. For this example, we'll use a text title.

- 1. First, use the left-hand side menu to add a text object to the scene.
- 2. Make a double-click on the text layer.
- 3. Open the "Add object" menu at the top and select "Movement" -> "Movement map".
- 4. In the **Object's position settings** window, select the movement map you previously saved on your PC and hit OK.
- 5. Notice that the settings window also allows you to change the starting point for the map. This means you can start applying the trajectory to the object from the beginning of the scene, from the cursor position, or manually.
- 6. Once the map looks as expected, hit the "Apply editing" button.

After you've assigned the movement map to the text object, go to the Properties window and use the available settings for higher movement precision:

Coordinates (X/Y) – initial coordinates of the object in the preview window. **Object creation time (ms/frame)** – the moment you want to assign the movement map to the added object.

Object duration time (ms/frame) – this parameter defines for how long you want to apply the movement map to that object. Just like the previous parameter, this one can be defined either by milliseconds or by frames.

The **Movement map** setup menu includes the following parameters:

- Movement map the map used in the project.
- Mapped video the video used for drawing the movement map. If you specify the
 video file here, its parameters and the parameters of the map will be automatically
 adjusted to each other. If you leave this field blank, the movement map will not
 adjust to the parameters of the video.
- Lost process the object's movement mode in the tracking loss area. Using this parameter, you can decide how the object should be moving while in the tracking



loss area. There are three options to choose from:

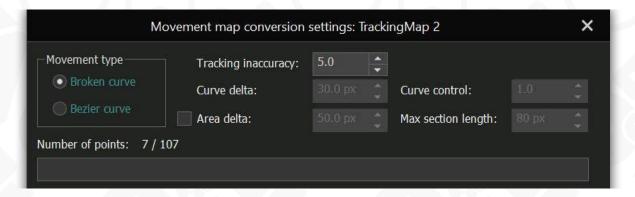
- 1. Approximate trajectory the object remains visible while the program draws its estimated movement trajectory.
- 2. Hide object when the object reaches the tracking loss area, it disappears.
- 3. Do not process map the object moves according to the trajectory you've drawn. To draw the missing piece of trajectory, you'll need to use the "**Movement**" tool.

Please note that if you don't draw the trajectory for the tracking loss area, the object will be moving according to the «Approximate trajectory».

Motion tracking map conversion

The map conversion tool allows for converting the movement map into a curve (broken line or Bezier curve), access the tracking points that form object movement trajectory, and fine-tune tracking precision.

To start map conversion, make a right mouse-click on the tracking map and select **Convert to curve**. The following window will pop up featuring conversion settings.



When you select this option, VSDC will convert the motion map to a Broken Curve by connecting all the tracking points on the scene. From there, you'll be able to fine-tune tracking accuracy and adjust the movement map based on your needs. Here is what each parameter in the settings window means.

 Tracking inaccuracy allows you to ignore some of the tracking points to make the movement path a little smoother. The best way to see what the value should be here is by changing the default number and checking the result in the preview window.



- 2. Once you've established the level of inaccuracy that works for you, go ahead and switch to **Bezier curve**. This means that instead of having a plane line connecting tracking points, you will get a smooth, adjustable spline.
- 3. We recommend continuing with the **Curve control** which makes the path a bit smoother. It's actually very similar to the tracking inaccuracy parameter: some of the tracking points around the curve just get removed to make it look more natural.
- 4. The next parameter you should work with is **Curve delta**. It allows you to straighten the curves of the path, up to the state of the original tracking path, and it's especially helpful if there's too much space between tracking points, and the object movement doesn't meet your expectations.
- 5. Similarly, **Area delta** also straightens the curves of the path. However, this parameter uses the area around the curves for calculations.
- 6. Finally, you can apply the **Max section length**, and the number of tracking points will get optimized based on the maximum possible distance between them.

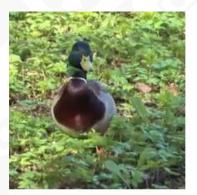
Notice that at the bottom of the settings window, you can see the actual **number of points** in your motion tracking map. Another handy feature is the **Hide object when tracking is lost** checkbox. If you select it, you can remove the object from the scene for a while.

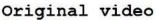
7. When ready, hit **OK**. You'll notice that the tracking map will be converted back into the movement map. The number of tracking points will decrease, and the timeline will include the keyframes you can work with using your mouse or the Properties window settings.



Applying a mask tool

If for privacy reasons, you need to hide the identity of a person in a video, you can blur or pixelate the face of this person. Let's see how to do it.





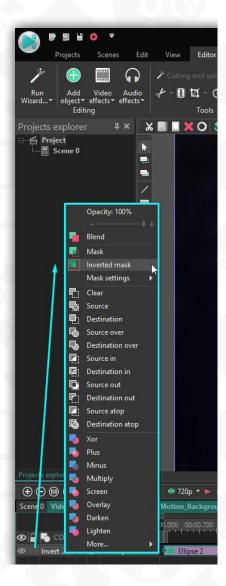


Pixelize effect



Blur effect

- 1. Activate the video object on the **Timeline** clicking it with a mouse. Place the cursor at the moment from which you plan to hide an object on your video.
- Apply an appropriate video effect. Click the Video effects button on the Editor tab, select one of the Blur effects or the Pixelize effect in the Filters category.
- 3. Check the **From cursor position** box within the **Object position settings** window and click **Ok**. You will be able to correct the position of the effect any time later directly on the **Timeline area.**
- Adjust the Blur or Pixelize level within the Properties window to achieve the necessary result.
- 5. Double click the effect line on the **Timeline** and select **Ellipse** on the **Objects tools** toolbar.
- 6. Place the cursor to the **Scene area**, it becomes a crosshair, click and stretch the ellipse to around the object you want to hide. Make sure that the third type of the **Ellipse** style is selected on the **Editor** tab.





- 7. Open the **Composition mode** section of the **Timeline area** and select the **Inverted mask** option. This option allows you to leave the pixelated or blurred area within the **Ellipse** object only.
- 8. In case the object (you have just hidden) moves on the video, it will lose its mask. To improve it, you can use the **Movement** feature of the program. Double click the ellipse line on the **Timeline** and create a moving object following the instructions in the section of the same name above.



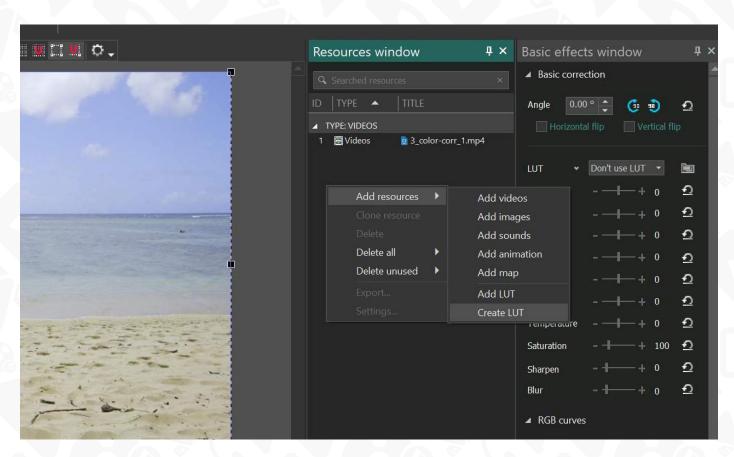
LUT editor

LUT, or a Look Up Table, is a set of values defining how color tones should be modified in a video or an image. Each LUT contains a table with information on what hue, saturation, and lightness values should be for each color tone. When you apply a LUT to an image, it compares the original values with the table values and changes the original accordingly.

In addition to the 10 built-in LUTs available directly in the **Basic effects window** and Video effects menu, VSDC has a built-in **LUT editor**. The LUT editor allows you to create your own LUTs and save them as templates, edit existing LUTs, including LUTs imported from 3rd-party resources, and export custom LUTs to further use them in other photo or video editors.

How to create a new LUT in VSDC

To get started, import your image or video to the scene. Open the **Resources window** (if you can't find it, click **View** in the menu at the top and select **Resources window**). Then click with the right mouse button anywhere in the Resources window and proceed to **Add resources -> Create LUT.**

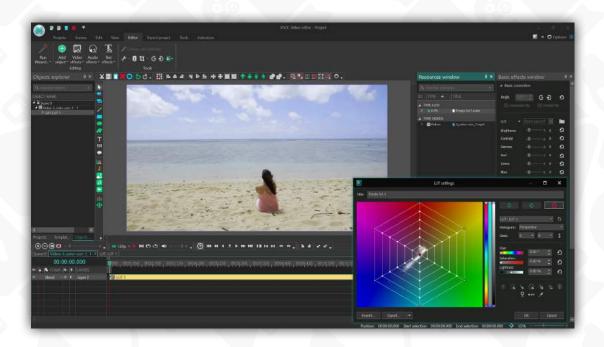


Your new LUT will be added to the list of resources and named "Empty lut 1.cube."



Double-click the image or video to open it and drag the LUT from the Resources window to the scene. Keep in mind that by default, the LUT will be added from the playhead position on the timeline, but you'll be able to adjust it manually.

Finally, double-click the LUT icon in the Resources window to open a LUT editor. You will see a pop-up window featuring an HSL histogram and a compact menu on the right side.



Understanding the histogram and the grid - Web tab

The white spots on the histogram help you identify which color tones are used in the video. Predominant color tones produce more saturated white spot areas.

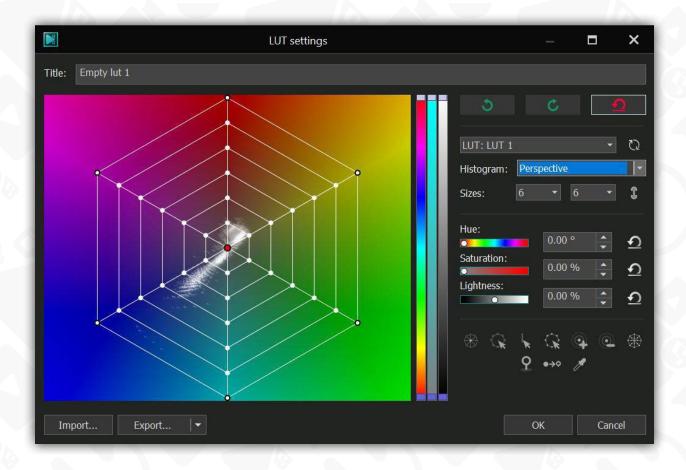
If you switch between two types of histograms – **Perspective** and **Orthographic** – you'll notice that the white spot pattern changes as well.

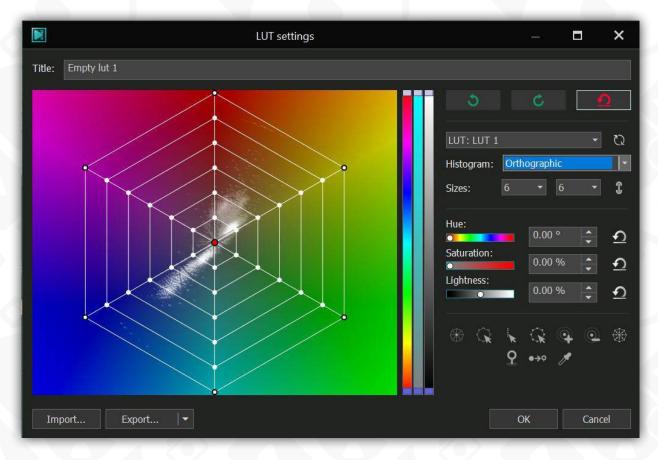
The reason why the color tones are reflected differently is that the perspective histogram includes lightness values, meanwhile, the orthographic histogram excludes them. If you're trying to correct overexposed or underexposed footage, you should use the perspective histogram

Once you've selected the histogram type, you can also adjust the number of rays (using **Sizes**). Typically, the default setup works for most, but if you're having a trouble selecting the right color tone on the grid, additional rays may be helpful.

Control points on the grid are interactive. If you select any point, you'll see its **Hue**, **Saturation and Lightness** values on the right. Toggle the HSL sliders or just drag the point around to get an idea of how things work.







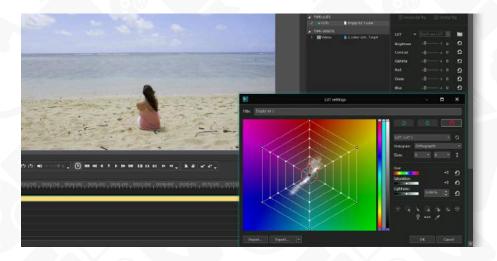




Saturation control settings

On the histogram, less saturated colors are located in the center, so the closer to the edges we get, the higher saturation is. For example, if you're working with raw footage, its color tones are typically unsaturated. That's why the white spots on the histogram will be located primarily in the center.

To increase saturation for all color tones in the video at once, select the circle of control points that includes all the white spots (which means all the color tones in the video) and expand it by toggling the saturation slider on the right side.





Similarly, if you want to increase or decrease saturation for a particular color tone, you can select control points in that color tone section and drag them closer to the center or closer to the edge.

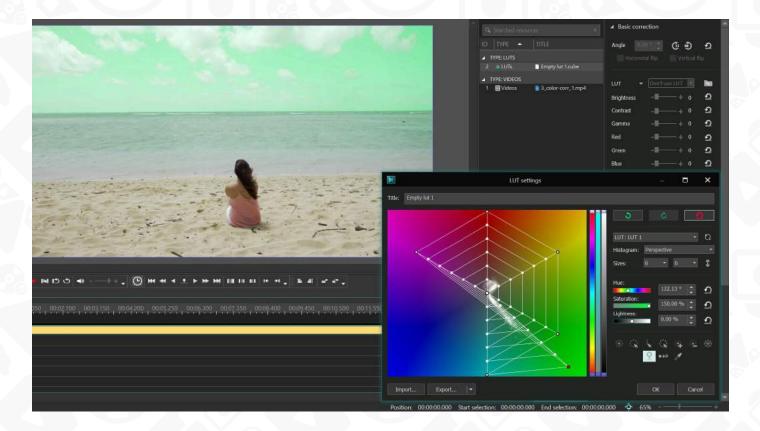
Hue control settings



Hue values change when we move points around the histogram. Essentially, you can replace any color with another one by changing its hue. To do that, select the ray of control points in one color section, grab it by the edge point, and drag it to another color section.

When you change hue for any color tone, the white spots will be rearranged on the gradient as well. This happens because the color scheme of the video gets rewritten.





Quick tip. If you need to select a particular color tone in the video, but you're unsure how to identify it on the histogram, use the eyedropper tool from the right-side menu. Click the eyedropper icon and head to the preview window to find the color tone you want to work with. As you move the eyedropper around, you'll notice two little squares on the histogram: purple and green.

The purple square shows which part of the histogram contains the color the eyedropper is currently pointing at. The green square shows the nearest control point on the grid; to select it, click the color in the preview window.

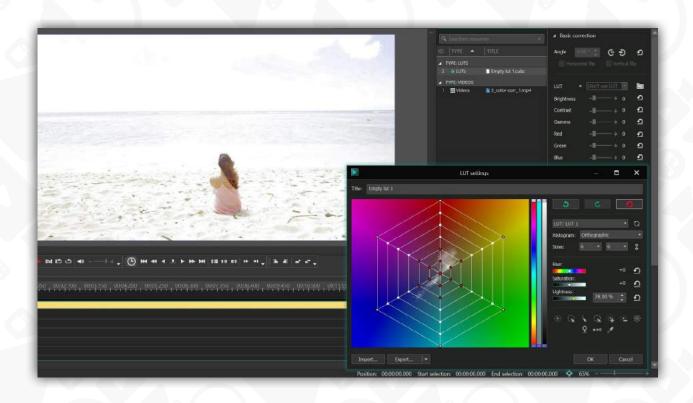
Lightness control settings

This option allows you to make the color tones in the video darker or brighter. Note that you can adjust brightness for all color tones or selected color tones only. For example, if you want to adjust lightness for a certain color, select a corresponding ray of control points If you need to brighten or darken all color tones in the video, select the corresponding circles on the grid.





Quick control point selection



You can select individual control points by clicking them directly, one by one, or by selecting the area on the grid where they're located. However, you can also use the point selection tools right under the HSL sliders:



This is what each option means:

- Select central point use this option to select the central point only
- **Select outer circle** use this option to select all the control points in the outer circle
- Select ray use this option to select a ray of points (indicate the desired ray by selecting at least one control point in it)
- **Select circle** use this option to select a circle of points (similarly, you'll need to indicate the desired circle first by selecting at least one point in it)
- Increase/Decrease selection use this option to increase or decrease the number of selected points based on the initial selection. For instance, if you've selected a single point, this option will select or unselect neighboring points. If you've selected a circle of points, this option will select or unselect neighboring circles.
- Select all use this option to select all the control points on the grid.



If you need to prevent a specific control point, a ray, or a circle of points from moving, use the Pin button. Similarly, you can use the Pin nearest button to lock the neighboring points.

The **Coefficient** tab represents the limiters for the HSL graphs, similar to the ones you can find in the Web tab. Using the controls available under each graph, you can change and limit the color values or create gradual fading effects.





The **Adjustments** tab allows you to set the brightness, contrast, gamma, temperature, and saturation values.

Note, the LUT editor allow you to perform color correction of the same object in stages. At each **stage**, you'll be able to define a scope of color tones you're working with and set the desired Hue, Saturation, and Lightness values for them. In other words, if you need to perform correction of several different color tones, there's no need to use the same histogram – you can create a separate stage for each tone, which is way more convenient. The left part of the LUT editor displays Scopes from the <u>"Scopes window" on page 31</u>.



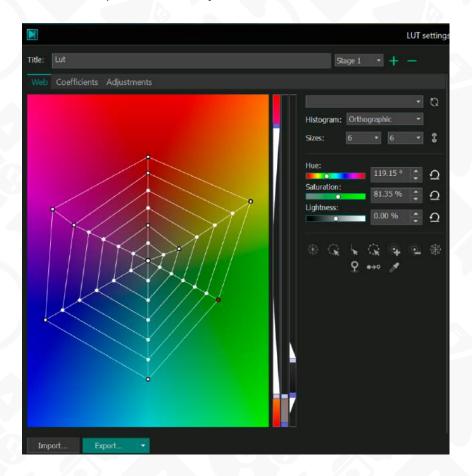
The last option available in the LUT Editor is named Reset Panel Layout. It allows you to revert to the original workspace and cancel any modifications you've made.





How to export your LUT from VSDC

Once you've finished working on the LUT, go up to the Title field and give it a name. To export the LUT from VSDC and use it in 3rd-party editors, simply click Export in the bottom left corner and select the output folder on your PC.





Keyframes

Keyframes are reference points that allow video editing software to determine the start and end of an animation or effect. In VSDC Video Editor, keyframes have a specific purpose and are used exclusively for color correction. You can create an unlimited number of keyframes in effects with color adjustment capabilities and assign individual parameters to each of them. The editor automatically provides smooth transitions between keyframes, creating harmonious gradients.

Configuring effect and object parameters based on keyframes is available in Key editor window which is located on the right next to Scopes window. To access the editor, navigate to the properties window of the selected object or effect, and click on '...' next to the parameter of keyframe editing.



Creating Keyframes

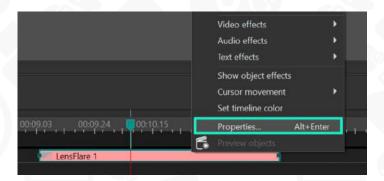
As an example, let's consider applying the **Lens Flare** effect to a video:

1. On the timeline, select the file to which you want to apply the effect. Then open the Video Effects menu located above the preview window. In the Nature section, find Lens Flare and click on it. A window with effect position settings will open. You can modify these settings or leave them at their default values by clicking OK.





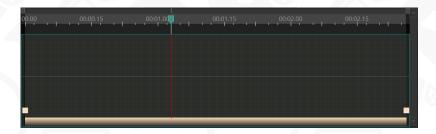
2. On the timeline, find the applied effect and click on it. Then go to the **Properties window** located on the right. If the Properties window is not open, right-click on the effect and select **Properties**.



3. In this window, find the **Color Tone** parameter and click on the tree dots icon next to it. The Scopes window will change and display a graph where you can create and modify keyframes.



4. By default, all effects with color adjustment parameters contain two keyframes: the first and the last. They are represented by squares of the same light brown color on the timeline.



5. To create a new keyframe, move the cursor to the desired position on the timeline. Then return to the **Properties window** and find the diamond-shaped icon next to the **Color Tone** parameter. Click on it to create a new keyframe.



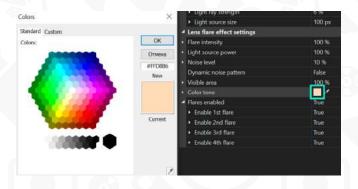


- 6. If the diamond icon is filled, it means that a keyframe has already been created, and clicking on the icon again will remove it. If you see only the outline of the icon, it means that a keyframe has not been added yet, and you can create one.
- 7. Use the left and right arrow keys located next to the diamond to navigate between keyframes.



Changing the Color of Keyframes

After creating keyframes, you can assign different colors to them. To select a desired color, simply double-click on the corresponding keyframe on the timeline or go to the **Properties window** and click on the small colored rectangle that represents the current color of the keyframe. In this example, we have applied the **Lens Flare** effect, so this option is located in the **Color Tone** section. In the opened panel, you can choose a color or specify its value in **RGB** or **HEX** code format.



You can also change the color of a keyframe by moving it up or down the timeline. To do this, hold down the **Shift** key and drag the keyframe to the desired position.





If you want to select a color directly from the scene, use the **Eyedropper t**ool located in the Properties window. However, keep in mind that the timeline cursor must align with the edited keyframe for the Eyedropper icon to appear.



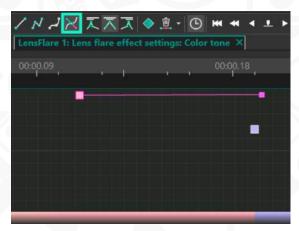
You can assign different shades to each keyframe, and the algorithm will provide smooth transitions between them. After assigning colors, the gradient bar displayed below the keyframes on the timeline will automatically update, showing how the effect's color will change during playback. If you want to adjust when a keyframe appears or disappears in the video, simply move it to the right or left while holding the **Shift** key.

Controlling Color Transition between Keyframes

If you want to maintain the color during the transition between keyframes and set different durations for fading out the old color and fading in the new color, follow these steps:

- 1. On the timeline, place the cursor on the keyframe whose color you want to preserve.
- 2. Locate the option **Parameter change along a Bezier curve**, which is positioned on the same line as the red preview start button, and click on it.
- 3. While holding down the **Ctrl** key, click on the keyframe and move the mouse to the right or left. This action will display two vectors of different colors emanating from the selected keyframe.



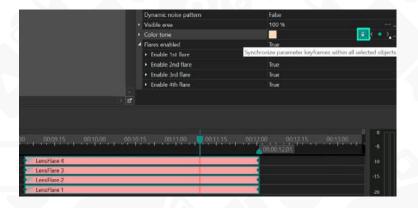


The vectors represent the extension of the keyframe's color. The longer the vectors, the longer the color will remain constant without transitioning to the next one. If the vectors are not visible, the transition between colors will occur smoothly with equal weighting of both colors. Each vector can be individually adjusted using the mouse.

Adding Additional Effects and Synchronizing Parameters

When working with the editor, you can synchronize keyframes between identical effects with color adjustment parameters. To synchronize the colors, follow these steps:

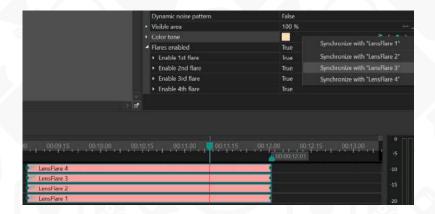
- Select two or more identical effects on the timeline. In our case, let's choose the Lens Flare effect.
- 2. Locate the synchronization button in the Color Tone parameter of properties window and click on it. This button is positioned next to the left-pointing arrow. Note that if the keyframes are already synchronized, the button will not appear.



By default, the keyframes will be synchronized from the first Effect selected. However, if you want to copy keyframes from another Effect, right-click on the synchronization button.



4. From the menu that appears, select the desired Effect that you want to use as the source of keyframes.



Below, you can find a table describing the parameters in various objects/effects that you can use to create keyframes and assign colors to them:

Object	Properties
Text	Brush – Transparent/Solid
	• Color
Curve line	Pen - Solid
	• Color
	Pen – Gradient
	Start/End color
	Pen – Point gradient
	*By selecting this mode, double click the Curve line on the
	timeline, select any of its control points and go back to the
	Properties window:
	 Add parameters
	o Brush gradient settings
	o Color
	o Pen gradient settings
	o Color

Audio spectrum	Type – Peaks
	Start color
	Type – Gradient peaks
	Start/Middle/End color
	Type – Customizable peaks
	Start/Middle/End color
	Contour color
	Type – Gradient lines
	Start/Middle/End color
	Type – Gradient lines with blur
	Start/Middle/End color
	Border line color
	Peak caps – Simple line/Dots
	Peak cap color
Free shape	Brush – Point gradient
	*By selecting this mode, double click the Free shape on the
	timeline, select any of its control points and go back to the
	Properties window:
	Add parameters
	o Brush gradient settings
	o Color
	o Pen gradient settings
	o Color
Recoloring text effect	Apply to glyph – Color transformation/ Color and alpha
	transformation
	• Color
	Apply to contour – Color transformation/ Color and alpha
	transformation
	• Color
	Apply to background – Color transformation/ Color and
	alpha transformation
	• Color
Tracking point	Add parameters
	Brush gradient settings
	o Color
	Day and displayed a History
	Pen gradient settings
	o Color

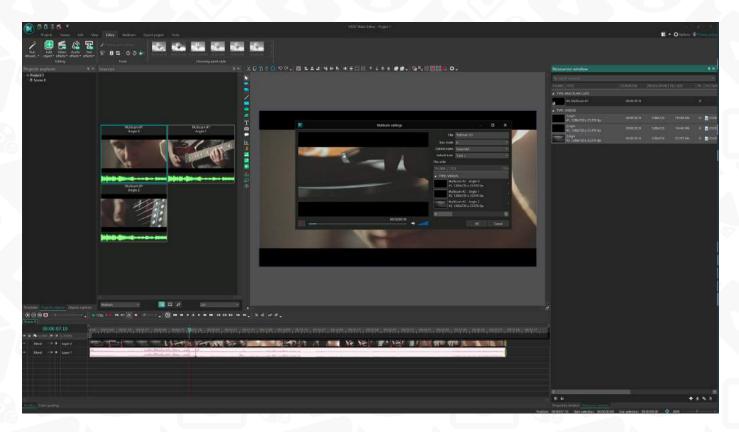


Bokeh glare	Flare settings
	Use random color – False
	o Color
Lens flare	Color tone
Shadow	Shadow color
Glitch	Use stage №
	Effect Type – Fill with color
	o Flares color
Shadow	Shadow color
Glitch	Use stage №
	Effect Type – Fill with color
	o Color
Matrix	Mix mode – Overlay/Color burn
	 Use layer №
	o Color
Paper burn	Outer zone color
	Inner zone color
Shattered glass	Fracturing – Centered/Disbanded
	Backside color
	Border color
Background remover	Mode - By HSL Chromakey color/By YUV Chromakey color
	Chromakey color
Borders	Mode – Solid/Light gradient/Dark gradient
	• Color



Multicam

The Multicam editing mode is designed for video creators who shoot with multiple cameras. It allows switching between different camera angles and makes it easy to synchronize audio and video from all resources on the timeline.



How to create a multicam clip

To get started open the **Resources window** located on the right side of the main window and add your files just by dragging them from your desktop. Next, select the files, make a right mouse button click, and select **Create a multicam clip**.

Next, you will see a pop-up window showing the options available for multicam settings.

1. Sync mode - defines the synchronization algorithm. If you select In, the files will be synchronized through the beginnings; if you select Out, the files will be synchronized through the endings. Timecode will be a good choice if you used timecode synchronization while shooting, and finally, the last synchronization algorithm Sound is based on the audio tracks. In this case, the program analyzes audio files and places the video files accordingly.





- 2. **Camera name** defines file names shown on the Source window. Explore options in the dropdown menu, and you'll see the resulting names.
- 3. **Default track** helps you choose the default audio track for the selected video file in the clip order section.
- 4. Clip order determines the order the video is displayed in the Source window.

Once you've finished adjusting the multicam clip, click OK to apply the settings, go back to the **Resources window**, and drag the multicam clip onto the timeline.



Working with the multicam clip

On the timeline, your multicam will look like a normal video with just a couple of differences. For example, you have green lines indicating the beginnings and the endings of all files.

Also, the multicam contains all the camera angles and audio tracks you've added, however, you can't open a multicam with a double-click as you would with a regular file, so you can't manually edit the tracks within it.

To start working with a multicam file, go to the View tab and open Sources. This panel contains all the camera angles and audio files you've added to the multicam-file.



To switch between angles, simply click on the desired file, and the audio or video file will adjust accordingly on the timeline.

You can do that during the playback as well as when the playback is paused.

If you would like to select a video or audio and edit them separately, you can do it by choosing a different option in the Sources window. Notice, the first option is called **Split audio** and video – this tool works with both video and audio tracks; the second option, **Split video**, works with video tracks only; and the third option, **Split audio** – works with audio tracks only.



The same set of tools is available in the **Multicam toolbar** (see Multicam tab), so feel free to use it wherever is more convenient for you.

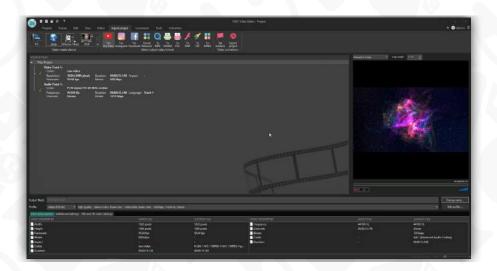




Saving videos

After you finish working on you project, save it as a video file in a suitable video format.

1. Go to the **Export project** tab and select one of the available video formats. First, choose a media device on which you plan to play the video then a format supported by the chosen device. To see the whole list of supported devices, click a small arrow button in the **Select media device** field.

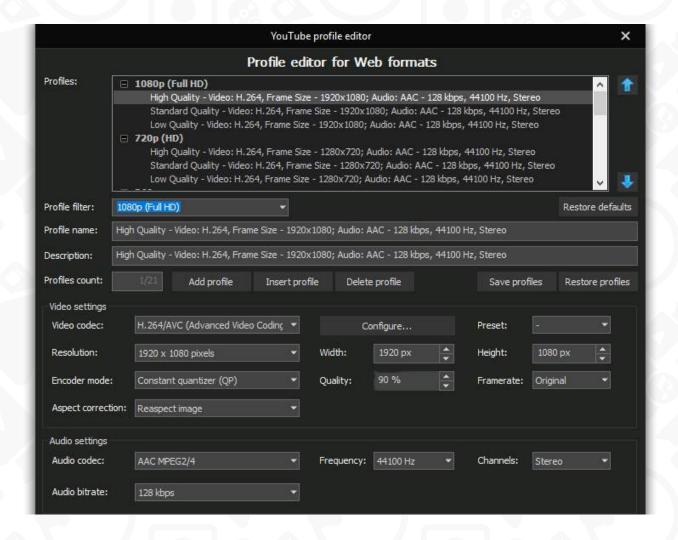


You can find a detailed description of all the available devices and formats in the **Program Interface** part of the manual.

- 2. Indicate the path to store the resulting video in the Output file(s) field.
- 3. Select the necessary profile in the corresponding field and change its quality if necessary. You can also configure your own profile clicking the **Edit profile** button.







- 4. Click the **Export project** button to start the conversion process. If you used some premium options, you will see the following message showing the list of features used in your project.
- 5. After the conversion process is completed, you will get a video file of the selected format. Open the **Tools** tab and use the **YouTube uploader** application to upload the resulting video directly to your YouTube account or use the **Disc burner** application to burn video to a compact disc or create a DVD video

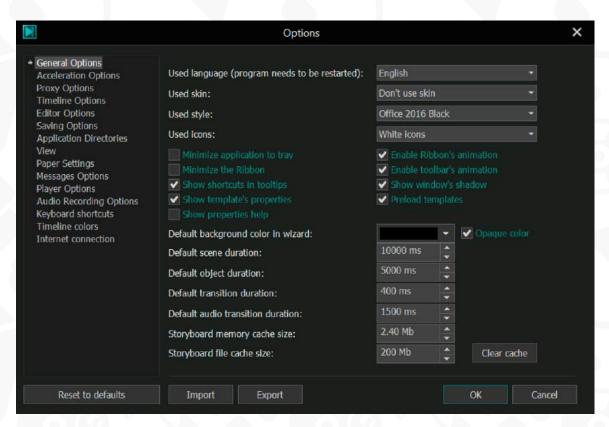
You will be able to upgrade your version of the program and save your project with all the applied options. You can also click the Continue button and export your project without premium features.



Program settings

To access the program settings click the **Options** button at the right top corner of the **Main window**. An additional window will open allowing you to change settings of five sections: General Options, Acceleration Options, Application Directories, View and Paper Settings.

General Options



Here you can change the following parameters:

- Used language the language of the program interface. The available languages are English, German, French, Italian, Russian, Japanese, Spanish, Portuguese, Chinese Simplified, Hindi, Turkish, Urdu, and Farsi. To activate the selected language, you need to close and restart the program.
- **Used skin** the skin of the program interface. The available skins are Blue, Black, Black v2, Aqua and Silver
- **Used style** the style of the program interface similar to the Office software. The available styles are Office 2007 (black, blue, silver, aqua) and Office 2010 (black, blue, silver) and Office 2016 (Black, White, Gray).



- **Used icons** the icons used in the Main window of the program. They can be colored or black.
- **Minimize application to tray** check this box if you prefer to minimize the application to the System tray while working.
- Minimize the Ribbon check this box to collapse the Ribbon Command Bar to save space on the Main Window. When the ribbon is minimized, the command buttons are hidden but the tabs are visible.
- **Show template properties** enable this option to open the template properties in the Properties window on the Editor tab.
- **Show properties help** enable this Option to see tooltips for the selected options in the properties window.
- **Preload templates** uncheck this box to disable preloading wizard templates. This will reduce the amount of memory that the application uses. If necessary, you can load the templates manually by clicking the Wizard tool.
- Enable Ribbon's animation & Enable toolbar's animation check these boxes if you prefer buttons to highlight and fade gradually.
- Show window's shadow untick this option to disable window shadows.
- **Default background color in wizard** use it to change the project background color, created by Wizard. Here you can uncheck the "Opaque color" option to create a transparent background.

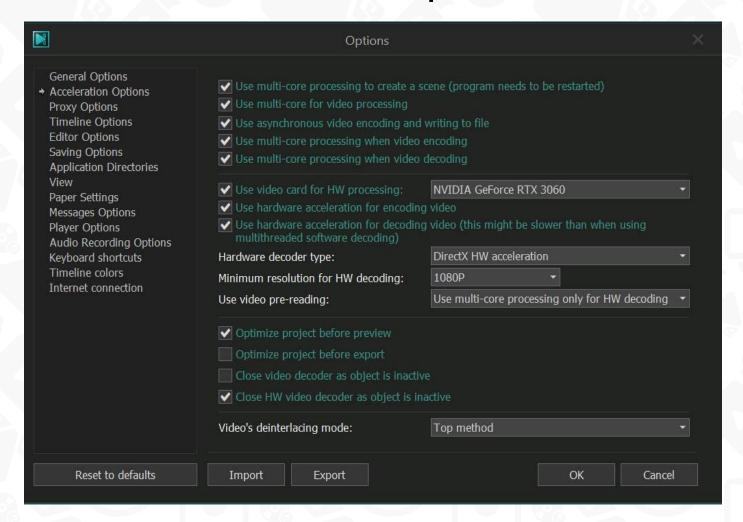
To change the duration of the main project parameters, use the following options: **default** scene duration, default object duration, default transition duration, default audio transition duration.

Storyboard memory cache size and **Storyboard file cache size are** used to limit how much memory can be used by the software to save the intermediate result.

Use the "Clear cache" button to go back to default settings.



Acceleration Options



In general, the acceleration options help you effectively process video content while editing. It's possible to create a scene, read/write and decode/encode the video using the multi-core processor capability. All these options are enabled by default.

The hardware acceleration options will be especially useful for those who work with HD video. When this feature is enabled, the program treats HD or 4K files using the capacity of your video card.

Please note that hardware acceleration for video decoding is disabled by default, but you can enable it manually. The program automatically selects the type of HW decoder suitable for your PC. However, you can manually select another hardware decoder and change its resolution if you want to.

Acceleration may be required for the entire file / project with all its elements or separate parts of the project / video / image, so you can choose what type of hardware acceleration suits you.



Nvidia HW and **Intel HW** are the fastest hardware codecs that work with the entire file / project. They are supplied by manufacturers. The newer your PC's processor (Intel) and the video card (Nvidia) are, the faster these hardware codecs will work. In addition to hardware codecs, you will find the following hardware accelerators available: **DirectX Direct3D Cuda HW** They use a software decoder that decodes only those

DirectX, Direct3D, Cuda HW. They use a software decoder that decodes only those parts of the project / video / image that need to be accelerated. This affects their speed compared to Intel and Nvidia.

Users with the AMD APU and AMD graphics cards should select **DirectX, Direct3D. DirectX** is almost always faster than **Direct3D**, so consider choosing it whenever possible.

CUDA is an NVIDIA technology that makes programming on a graphics card easier. It allows your GPU to facilitate parallelization and resource usage decisions to maximize the performance.

Use video pre-reading – this option allows for performing video reading and decoding simultaneously with other tasks.

There are three video pre-reading options available:

- Don't use multi-core processing
- Always use multi-core processing
- Use multi-core processing only for HW decoding

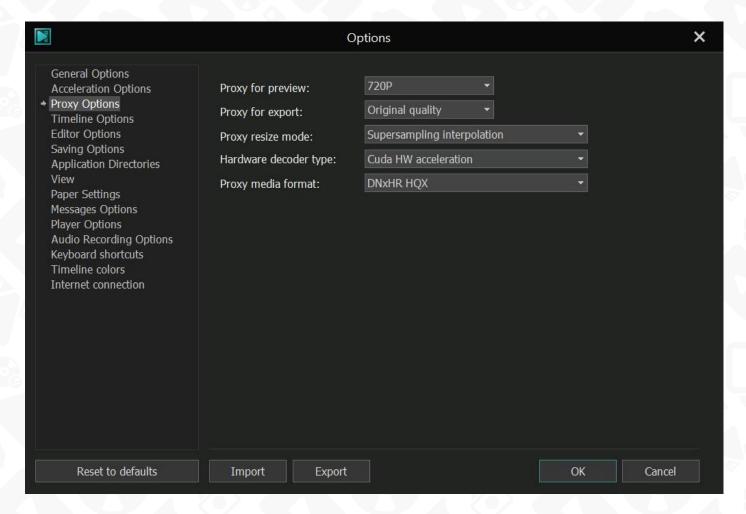
If you are running a low-end PC, it's always better to switch to "Don't use multi-core processing". The other two options may improve playback and rendering, depending on the processor load.

- Optimize project before preview/export enable these options to allow the program to open media content used in your project before preview or export.
- Close video decoder as object is inactive/Close HW video decoder as object is inactive – enable it to reduce PC memory usage.
- **Video's deinterlacing mode** select between 9 deinterlacing methods: Middle and Blending or Don't use deinterlacing at all.



Proxy Options

Proxy files are lower-resolution versions of your original video files. They are created to improve the editing process and eliminate preview lag, especially when working with high-resolution footage. In the section of options as illustrated below, you can control the settings related to proxy files. The proxy files themselves can be generated within the Resources window (refer to the **Resources window** section for more details).



Proxy for preview: By default, the program generates proxy files at a resolution of 720p. However, you have the flexibility to choose from six additional options to generate a proxy copy that reduces or eliminates lag during preview on your specific computer. Opting for a lower quality proxy helps minimize potential performance issues.

Proxy for export: When exporting your project, you can use proxies to quickly share files for review when the highest resolution of the original file is not necessary. There are five quality options available for you to choose from, ensuring the appropriate level of quality based on your requirements.

Proxy resize mode: If you notice any angular or pixelated visuals during the preview,



you can select from five available interpolation methods in this section. Experimenting with different methods can enhance the visual quality of the proxy footage.

Hardware decoder type: In this section, you can choose the type of hardware decoder to be used. By default, the software employs your graphics card for proxy creation. To determine which card is being utilized, navigate to the Acceleration options, where the "Use video card for HW processing" checkbox indicates the card in use. Regardless of the checkbox status, the software still utilizes the graphics card for proxy processing. Select the appropriate hardware decoder based on your system configuration: NVidia Hardware for Nvidia graphics cards, Intel HW for Intel graphics cards, and DirectX or Direct3D for AMD APUs and AMD graphics cards. DirectX is generally faster than Direct3D, so it is recommended whenever possible. CUDA, an NVIDIA technology, facilitates programming on a graphics card, enabling parallelization and optimizing PC resources for optimal performance.

Proxy media format: Here, you can choose the codec for creating proxy video files. The available options include H264, H265, and DNxHR. DNxHR codecs offer different quality profiles, while the selection of H264 and H265 codecs depends on the graphics card chosen in the Acceleration options. Although H264 and H265 codecs may result in slightly larger file sizes, they provide faster processing on modern hardware.

The available DNxHR codec profiles are as follows:

DNxHR LB (Low Bandwidth): 8-bit 4:2:2 Offline Quality.

DNxHR SQ (Standard Quality): 8-bit 4:2:2 suitable for delivery formats.

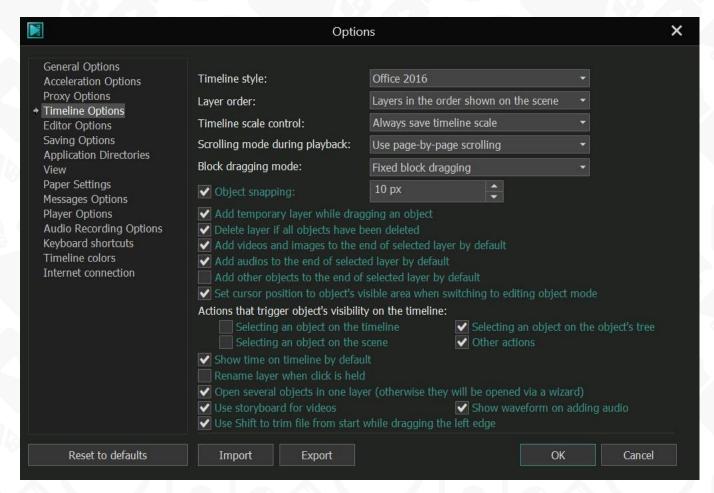
DNxHR HQ (High Quality): 8-bit 4:2:2.

DNxHR HQX (High Quality): 10-bit 4:2:2 suitable for UHD/4K broadcast-quality delivery.

DNxHR 444: 10-bit 4:4:4 suitable for cinema-quality delivery.



Timeline options



This section allows you to select required settings for the timeline. You can also set **Layer** order and **Timeline scale.**

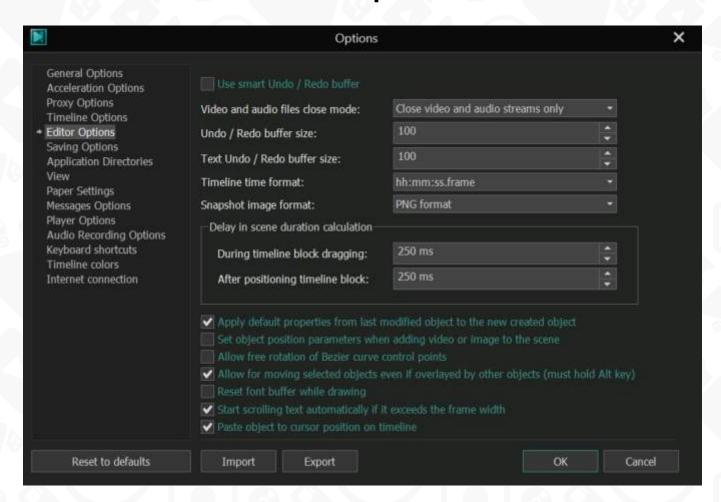
- Layer order this option allows you to determine how the layers will be displayed: in rendering order or in the order shown on the scene.
- Timeline scale control this option contains several available modes. By
 default, the program doesn't save the timeline scale. To avoid manual changes
 every time you switch between objects, select Always save timeline scale (with
 constant value) or Save timeline scale for every object.
- Scrolling mode during playback this option is mainly used when the timeline
 is zoomed in and you want it to follow the cursor during playback.
- Block dragging mode this option allows you to select one of two appropriate
 modes from the drop-down list. Using the default method may distort the files
 sequence when dragging. The second method allows you to group the order of
 the files.



- **Object snapping** this value allows you to adjust the distance between objects when moving them on the timeline.
- Actions that trigger object's visibility on the timeline check required actions that make object visible.



Editor options



This option can be particularly useful for those working with large projects. When the standard mode is enabled, the program stores a complete history of all the changes applied to objects in the clipboard. Check the "**Use smart Undo/Redo buffer**" box to specify the media file whose changes will be transferred to the buffer for saving and further recovery, if necessary. This action will reduce the amount of computer memory used by the software.

Video and audio files close mode determines the decoding process on the timeline. When switching between these options, the editor only reads the file that is displayed in the main scene window. The rest of the files are either closed completely, or the editor disables their streams reading. Please note that to enable this option, you need to activate the options "Close video decoder as object is inactive" and "Close HW video decoder as object is inactive". They are located in the acceleration section.

The parameters named "**Undo/Redo buffer size**" and "**Text Undo/Redo buffer size**" will help you determine how many changes should be stored on the buffer. By default, the program saves 100 consecutive changes made in media files and text objects, respectively.



Timeline time format provides two available formats to display time in the top left corner of the timeline.

Delay in scene duration calculation allows you to delay the recalculation of the scene duration when dragging blocks on the timeline.

The option "Apply default properties from last modified object to new created object" is enabled by default. The editor automatically saves changes applied to all of the shape tools, text and some effects. If you uncheck this box, the editor will use the default settings for each new object added to the scene.

If you enable the "Set object position parameters when adding video or image to the scene" parameter, you can manually determine the position of the added object on the scene. When you add a video or an image to the scene, you will need to click the Scene area and stretch the cursor to place the object. By default, a video or an image file immediately appears on the Scene area and automatically fits its size.

The parameter **Allow free rotation of Bezier curve** control points allows you to create a 90-degree angle on the Bezier curve.

The default option **Allow for moving selected object overlapped by the top object in the scene editor** allows you to select any object on the timeline and move it around on the scene, even if it's overlapped by another file. (Alt key must be pressed)

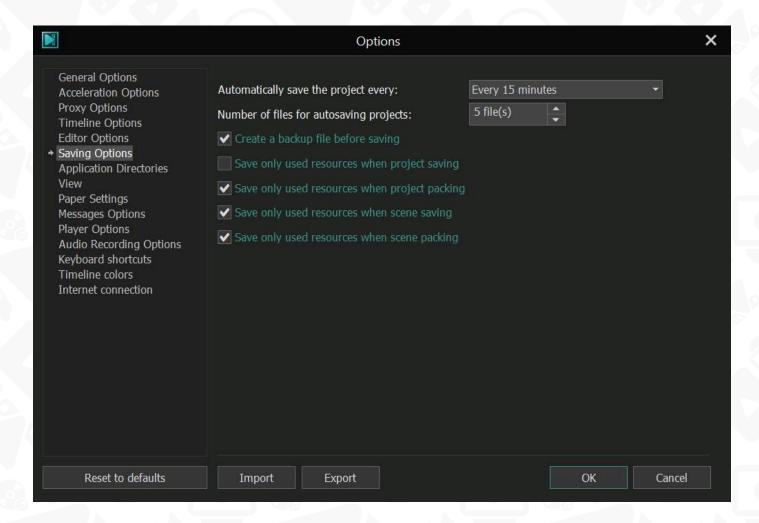
If the font used is not displayed correctly you can reset font buffer while drawing.

In case the text line is longer than the frame of the text box on the scene, enable the option "Start scrolling text automatically if it exceeds the frame width" to display the end of the line or keep it disabled to display the beginning of the line.

Paste object to cursor position on timeline - this option is enabled by default, allowing you to place objects from the cursor position on the timeline when using the drag and drop option to add them to the scene.



Saving options

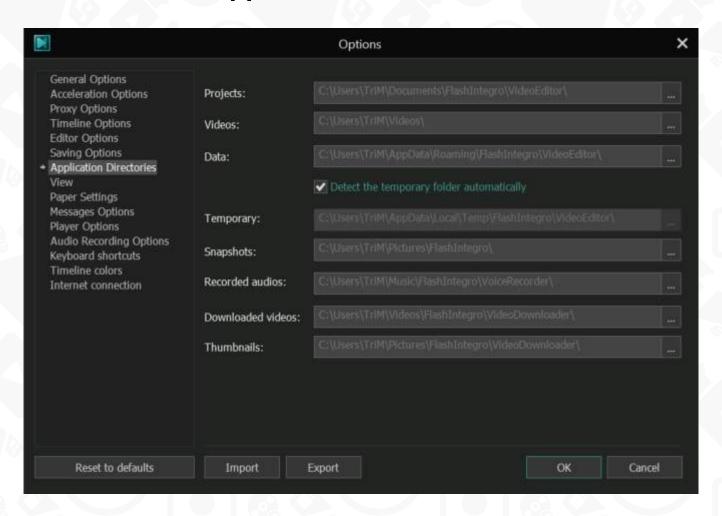


In this field you can select when it's necessary to save input resources.

- Automatically save the project every select an appropriate period from the drop down list to enable the Auto Save option.
- **Number of files for autosaving projects** this option helps you specify the number of automatically saved project copies. Note, the option only works if you have the auto save option enabled. By default the project copies are saved in the same folder as the main project file.
- Create a backup file before saving this box is checked by default and it
 automatically creates a backup copy of your project file.
- Save only used resources when Project saving/packing and Save only
 used resources when Scene saving/packing these options indicate whether
 to save the media files used in the project or scene, or simply create links to their
 locations on the computer to reduce the size of the project or scene file.



Application Directories

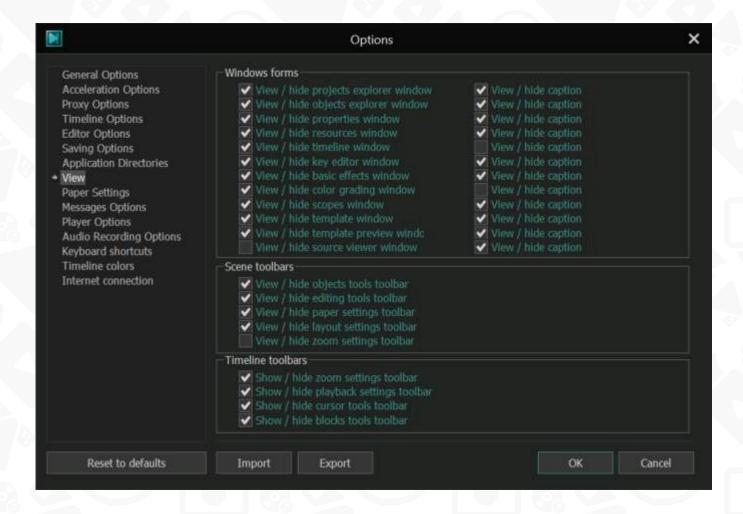


Here you can see and change the paths to save files (Projects, Videos, Snapshots, Data) on your computer. The default directories are located in the **Users** folder of the hard disk drive.

To change the folder to store temporary files, uncheck **Detect the temporary folder** automatically box.



View

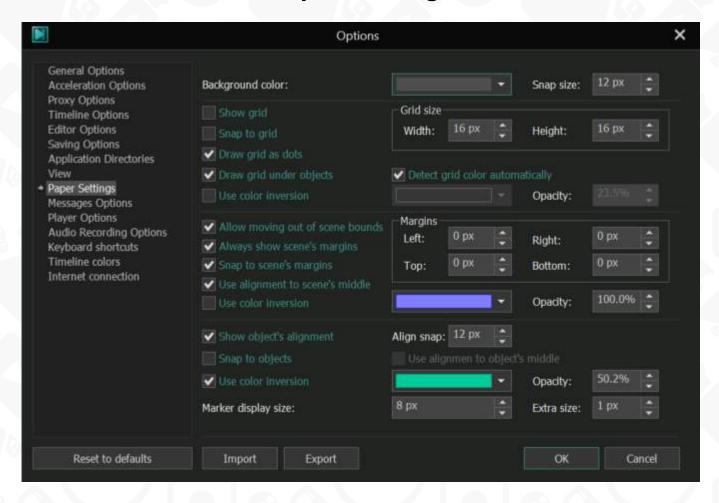


This section repeats the **View** tab of the **Ribbon command bar**. It allows you to enable or disable some parts of the program interface. You can customize the **Main window** of the program activating or hiding the following areas: **Projects explorer**, **Objects explorer**, **Properties window and Resources window**.

You can also show or hide the following panels: **Objects tools, Editing tools, Paper tools, Layout tools, Zoom tools.**



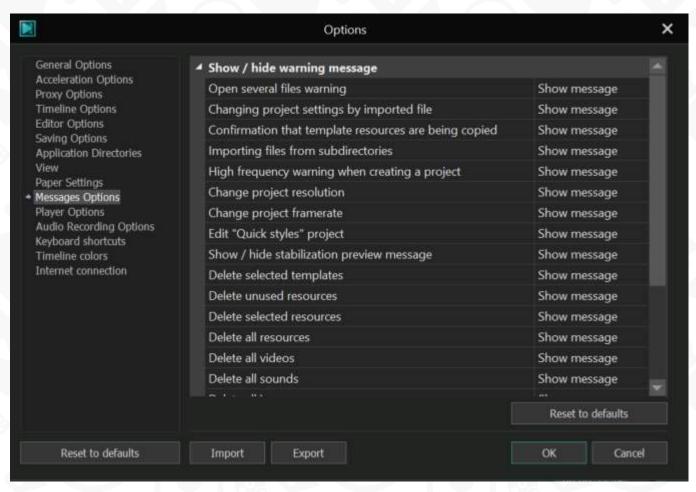
Paper Settings



This section repeats the **Paper tools** toolbar, which helps perform your editing operations with more precision by drawing a grid over the **Scene area**.



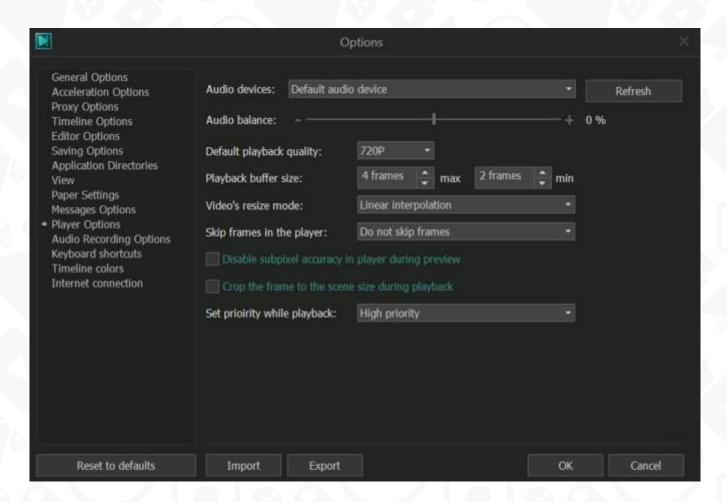
Message options



This section allows you to disable/enable warning messages which provide explanations of the program functions.



Player options



- Audio devices use this dropdown menu to change an audio device.
- Audio balance move the slider to change the audio balance value.
- **Default payback quality** set video file quality for the preview window.
- **Playback buffer size** manually indicate the minimum and maximum number of frames stored in the buffer.
- Video's resize mode select one of the available resize modes. By default, the
 program uses the Linear interpolation mode to resize images. To prevent the loss
 of image quality you can select one of the advanced resizing methods, such as
 Nearest neighbor interpolation, Cubic Interpolation, Supersampling interpolation
 and Lanczos interpolation.

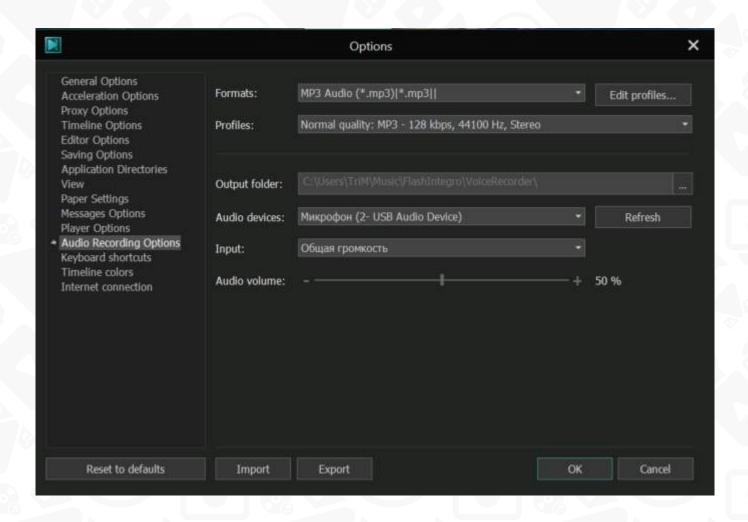
In case your PC is not coping with the amount of information that needs to be processed simultaneously and the preview window lags use the **Skip frames option** and **disable subpixel accuracy in player during preview**.



- Crop the frame to the scene size during playback check this box to make all files fit the scene during preview.
- **Set priority while playback** switch between the three available modes to change the priority of your CPU. It will allow the program to use more power of your processor for smoother playback.



Audio recording option



In this section you can set appropriate settings for audio recording such as output **format, audio device, audio volume** and etc.

- Format select one of the available audio format for recording.
- **Profiles** use the most appropriate profile settings such as bitrate, frequency and channels. To change settings, click **Edit profiles**.
- Output folder set the path where the program saves your recording.
- Audio devices choose a required device that captures sound. To detect a new device, click Refresh.
- Input select an input audio source.
- Audio volume adjust the volume of recording.



Keyboard shortcuts

In this section, you'll find the keyboard shortcuts available in the editor, learn how to reassign them or create your own combinations.

The first field is called **Keyboard Scheme**. It's designed for those switching from a different video editing program. You'll find 4 keyboard shortcut schemes there: Default, Adobe Premier, Filmora, HitFilm.

A complete list of available hotkeys is available in a table in the middle of this window. To navigate through the table, use the **Shortcuts filter** option, which will help you quickly find the desired keyboard shortcut.

When you select any of the commands from the table, the assigned hotkeys will appear in the **Shortcut for selected commands** field. If necessary, you can remove them using the option of the same name or reassigned in the field under the **Press shortcut keys option.**

If the new combination is already being used by another action, you will see a warning in the field named **Shortcut currently used by.**

If you want to reset the keyboard shortcuts to their default settings, click the **Reset** button next to the **Keyboard scheme**.

Projects			
New project		Ctrl + N	
Open project		Ctrl + O	
Close project		Ctrl + F4	
Save project		Ctrl + S	
Preview project		Ctrl + F7	
Export project		F7	
	Scenes		
Preview scene in separate window		Ctrl + F5	
Play scene		F5, SPACE	
	Edit		
Cut		Ctrl + X	
Сору		Ctrl + C	
Paste		Ctrl + V	
Delete		Ctrl + `	
Undo		Ctrl + Z	
Move selected object up		Alt + Up Arrow	



Move selected object down	Alt + Down Arrow
Move object to top	Alt + Home
Move object to bottom	Alt + End
View	
Show/hide Project explorer	Ctrl + 1
Show/hide Objects explorer	Ctrl + 2
Show/hide Properties window	Ctrl + 3
Show/hide Resources window	Ctrl + 4
Show/hide Timeline	Ctrl + 5
Show/hide Basic effects window	Ctrl + 6
Show/hide Templates window	Ctrl + 7
Show/hide Scopes window	Ctrl + 8
Scopes properties	Alt + Enter
Show/hide Objects tools toolbar	Ctrl + Shift + 1
Show/hide Editing tools toolbar	Ctrl + Shift + 2
Show/hide Paper tools toolbar	Ctrl + Shift + 3
Show/hide Layout tools toolbar	Ctrl + Shift + 4
Show/hide Zoom tools toolbar	Ctrl + Shift + 5
Panes manager	
Load configuration 1	Ctrl + Alt + 1
Load configuration 2	Ctrl + Alt + 2
Load configuration 3	Ctrl + Alt + 3
Load configuration 4	Ctrl + Alt + 4
Load configuration 5	Ctrl + Alt + 5
Load configuration 6	Ctrl + Alt + 6
Load configuration 7	Ctrl + Alt + 7
Load configuration 8	Ctrl + Alt + 8
Load configuration 9	Ctrl + Alt + 9
Configuration	Ctrl + Alt + 0
Editor	
Run Wizard Create sprite/slideshow	Ctrl + W
Add sprite	Shift + P
Duplicate	Shift + D
Add line	Shift + L
Add rectangle	Shift + R
Add ellipse	Shift + E
Add free shape	Shift + H
Add text	Shift + T
Add counter	Shift + O
Add subtitles	Shift + S



Add tooltip	Shift + U
Add chart	Shift + C
Add animation	Shift + N
Add image	Shift + I
Add audio	Shift + A
Add video	Shift + V
Add spectrum	Shift + W
Add audio abstraction	Shift + Alt + W
Add movement	Shift + M
Add movement map	Shift + Alt + M
Cut out fragment	Ctrl + Del
Trim start	Ctrl + Shift + [
Trim end	Ctrl + Shift +]
Split into parts	Ctrl + K
Rotate 90 degrees	Ctrl + R
Convert to sprite	Ctrl + P
Create snapshot	Ctrl + F12
Timeline	
Zoom in/Zoom out	Ctrl + Shift +
	Mouse wheel
Increase scale	Num +; =
Decrease scale	Num -; -
100 percent scale	Num /; /; \
Mute	Ctrl + M
Move to previous keyframe	Ctrl + Home
Move to previous second	Ctrl + Left Arrow
Move to previous frame	Left Arrow
Create marker	M, M
Move to next frame	Right Arrow
Move to next second	Ctrl + Right
	Arrow
Move to next keyframe	Ctrl + End
Set previous timeline scale	Num/, Num/; /, /;
	\
Increase layer height	Shift + Num+;
	Shift + =
Decrease layer height	Shift + Num-;
	Shift + -
Set minimum layer height	Shift + Num/;
	Shift + /; Shift + \



Create default marker	M
Extend work area to next frame	Shift + Right Arrow
Extend work area to previous frame	Shift + Left Arrow
Extend work area to next second	Ctrl + Shift + Right Arrow
Extend work area to previous second	Ctrl + Shift + Left Arrow
Extend work area to the beginning of the scene	Shift + Home
Extend work area to the beginning of the object	Ctrl + Shift + Home
Extend work area to the end of the object	Ctrl + Shift + End
Set playhead position	Ctrl + G
Move playhead to the beginning of the scene	Home
Move playhead to the end of the scene	End
Move playhead to the beginning of the object	Alt + [
Move playhead to the end of the object	Alt +]
Select all objects on timeline	Ctrl + A
Delete selected objects	Del
Curve editor	
Increase timeline scale	Num +; =
Decrease timeline scale	Num -; -
Set timeline scale to 100%	Num /; /; \
Create marker	M, M
Create default marker	M
Insert point	Ins
Remove point	Del
Move to previous keyframe	Ctrl + Home
Move to previous second	Ctrl + Left Arrow
Move to previous frame	Left Arrow
Move to next frame	Right Arrow
Move to next second	Ctrl + Right Arrow
Move to next keyframe	Ctrl +End
Content Editor	
Increase timeline scale	Num +; =
Decrease timeline scale	Num -; -
Set timeline scale to 100%	Num /; /; \
Create the snapshot	Ctrl + F12
Play the video	F5; Space; Ctrl + P



Cut the area from the video	Del; Ctrl + G
Delete the cut area	Ctrl + E
Delete all the cut areas	Ctrl + S
Move to previous frame	Left Arrow
Move to previous second	Ctrl + Left Arrow
Move to the following frame	Right Arrow
Move to the following second	Ctrl + Right Arrow
Move to the beginning of the video	Home
Move to the end of the video	End
Extend work area to previous frame	Shift + Left Arrow
Extend work area to previous second	Ctrl + Shift + Left
	Arrow
Extend work area to next frame	Shift + Right
	Arrow
Extend work area to next second	Ctrl + Shift + Right
	Arrow
Extend work area to the beginning of the scene	Shift + Home
Extend work area to the end of the scene	Shift + End
Player	
Play the video	Space; Play; Ctrl
	+ Pause; Ctrl + P
Stop the playing of the video	Ctrl + S
Rewind the video	Backspace
Increase audio volume	Up Arrow; B
Decrease audio volume	Down Arrow; C
Mute audio	Ctrl + M; Ctrl + D
Move to the previous frame	Ctrl + Left Arrow
Move back half a second	Left Arrow
Move to the previous second	Alt + Left Arrow
Move to the following frame	Ctrl + Right Arrow
Move forward half a second	Right Arrow
Move to the following second	Alt + Right Arrow
Play next file	Ctrl + A; Ctrl +
Play previous file	Ctrl + B; Ctrl +
Show file information	Ctrl + I
Show playlist	P
Show player always on top	Ctrl + T
Minimize player	Shift + Esc
Maximize player	Alt + Enter



Start / stop audio recording	Ctrl + R
DVD Bui	rner
Select all files	Ctrl + A
Delete selected files	Del
Enter the selected folder	Enter



Timeline colors



In this section, you can customize the colors of the blocks displayed on the timeline, depending on the category those blocks belong to.



Internet Options

In this section, you can configure the editor's Internet access settings and select how often you want the program to check for updates: Every time an update is out, Every day, Twice a week, Every month, Twice a month, Every month, Never.

