

# VideoStudio® ULTIMATE 2019

**User Guide** 

# Corel<sup>®</sup> VideoStudio<sup>®</sup> 2019 User Guide

Including VideoStudio Pro and VideoStudio Ultimate

# **Contents**

Quick start	1
Welcome	7
What's new in Corel VideoStudio 2019?	7
System requirements	10
Supported file formats	11
Hardware acceleration	12
Preparing for video editing	13
Installing and uninstalling the application	13
Starting and quitting the application	14
Updating the application	14
Corel Support Services	14
About Corel	14
Learning resources	17
Documentation conventions	17
Using the Help system	17
Corel VideoStudio 2019 User Guide PDF	18
Understanding VideoStudio terminology	18
Learning with video tutorials	18
Using Web-based resources	19
Workspace tour	21
Exploring the workspaces	21
Switching between workspaces	24
The Welcome book	25
Using the Player panel	25
Using the toolbar	28
Customizing the workspace	29
Changing the application language	31
Capture and import	33

Contents

	Using the Options panel in the Capture workspace	33
	Capturing videos and photos	33
	Capturing digital video (DV)	36
	Using DV Quick Scan	36
	Capturing analog video	37
	Importing from digital media	37
	Scanning and splitting scenes	38
P	roject basics	41
	Creating new projects and opening projects	41
	Setting project properties	42
	Creating custom profiles	43
	Using Smart Proxy for a faster, smoother editing experience	44
	Previewing your project or clips	44
	Undoing and redoing actions	45
	Showing and hiding grid lines	46
	Saving projects	46
	Saving projects by using Smart Package	47
	Adding cues and chapters	47
T	emplates	51
	Using Instant Project templates	51
	Split screen video templates	
C	Organize and find media	57
	Using the Library	57
	Sorting, viewing, and filtering clips in the Library	
	Searching the Library	61
	Resizing thumbnails	61
	Tagging files as 3D	
Т	imeline	65
	Switching between Timeline views	65
	Showing and hiding tracks	67

	Adding and swapping tracks	67
	Renaming tracks	69
	Adjusting track height	69
	Grouping and ungrouping	70
	Using Ripple Editing	70
E	dit media	73
	Using the Options panel in the Edit workspace	73
	Converting multiple files	76
	Adding video clips	76
	Adding photos	77
	Moving clips in the Timeline	78
	Rotate a video or photo	78
	Crop a video or photo	78
	Resizing/scaling a video or photo	79
	Time remapping	80
	Modifying video playback speed	81
	Using Freeze Frame	84
	Replacing media clips	85
	Trimming a clip	86
	Using Split by Scene	88
	Trimming video into multiple clips	88
	Saving trimmed clips	90
	Taking a snapshot from a video clip	90
	Adjusting the color and tone of clips	91
	Adjusting white balance	91
	Color grading with lookup tables (LUT profiles)	92
	Tone Curve	93
	HSL Tuning	94
	Lens Correction	95
	Pan and zoom for video and photos	97
	Working with the Mask Creator (Ultimate)	99
	Track transparency	104

Contents

3	60 video	107
	Editing 360 video	107
	Converting 360 video to standard video	108
	Tiny planet and rabbit hole effects from 360 video	110
Α	udio	113
	Adding audio files	113
	Using Audio Ducking to automatically adjust volume	114
	Splitting an audio track from a video clip	116
	Using Auto Music	116
	Balancing the volume of multiple clips with Normalize Audio	117
	Adjusting clip volume	117
	Trimming and cutting audio clips	117
	Stretching audio duration	118
	Applying fade-in/out	119
	Using the Sound Mixer	119
	Adjusting stereo channels	119
	Using the Surround Sound Mixer	120
	Mixing Surround Sound	120
	Duplicating an audio channel	121
	Applying audio filters	121
T	itles and subtitles	123
	Using the Title Safe area	123
	Adding titles using the Library	123
	Adding titles with the Subtitle Editor	124
	Formatting text	127
	Creating titles for the Library	130
	Applying text effects and animation	131
	Converting titles to image and animation files	132
3	D Title Editor	133
	3D Title Editor workspace	133

Creating and editing 3D titles	134
Transitions	137
Adding transitions	137
Saving and deleting transitions	
Morph Transitions	139
Seamless Transitions (Ultimate)	141
Graphics	143
Adding color clips	143
Adding color patterns	143
Adding backgrounds	144
Adding objects or frames	144
Adding Flash animations	145
Customizing objects, frames, and animations	145
Video filters	147
Applying filters	147
Marking filters as favorites	148
Applying multiple filters	148
Customizing filters	149
Overlay clips	151
Adding clips to overlay tracks	151
Adjusting overlay clips	151
Combining Overlay clips to create an Ultra HD (4K) video	153
Applying motion to an overlay clip	153
Adjusting the overall transparency of overlay clips	154
Adding borders to overlay clips	154
Blending overlay clips with the background	155
Adding a mask frame	157
Using video masks with overlay clips	157
Motion tracking	159

Contents

	Tracking motion of video objects	159
	Matching motion to a tracking path	163
	Customizing motion	167
T	racking paths	171
	Adjusting tracking paths	171
	Using objects on tracking paths	173
	Using the Path Library	175
P	Painting Creator	177
	Working with Painter Creator	177
	Switching between Painting Creator modes	179
	Creating images and animations	180
L	ive screen capture	183
	Starting a screen capture project	183
	Recording your screen	184
F	astFlick	187
F	Creating a FastFlick project	
F		187
F	Creating a FastFlick project	187 187
F	Creating a FastFlick project	187 187 188
F	Creating a FastFlick project	187 187 188 188
F	Creating a FastFlick project	187 187 188 188 189
F	Creating a FastFlick project	187 187 188 188 189
F	Creating a FastFlick project	187 187 188 188 189 190
F	Creating a FastFlick project	187 188 188 189 190 190
F	Creating a FastFlick project	187 188 188 189 190 190 191
	Creating a FastFlick project  Selecting a template (FastFlick)  Adding media clips (FastFlick).  Editing titles (FastFlick).  Adding music (FastFlick)  Applying Pan & Zoom effects (FastFlick)  Setting movie duration (FastFlick)  Saving to video files for computer playback (FastFlick)  Uploading to the Web (FastFlick).	187 188 188 189 190 191 191 192
	Creating a FastFlick project	187 188 188 189 190 191 191 192
	Creating a FastFlick project  Selecting a template (FastFlick)  Adding media clips (FastFlick).  Editing titles (FastFlick).  Adding music (FastFlick)  Applying Pan & Zoom effects (FastFlick)  Setting movie duration (FastFlick)  Saving to video files for computer playback (FastFlick)  Uploading to the Web (FastFlick)  Editing your movie in VideoStudio (FastFlick)  Making FastFlick templates	187 188 188 189 190 191 191 192 193

Stop motion animation	197
How to create a stop motion project	
Stop motion settings	
Opening and importing files for stop motion	199
Using the DSLR Enlarge Mode	
Multi-Camera editing	201
The Multi-Camera Editor workspace	201
Basic steps in multi-camera editing	204
Importing video and audio clips into the Multi-Camera Editor	204
Synchronizing video and audio clips in multi-camera projects	204
Choosing an audio source for your multi-camera project	205
Editing multiple clips to create a multi-camera compilation	206
Adding picture-in-picture (PIP) in the Multi-Camera Editor	208
Managing multi-camera source files	209
Saving and exporting your multi-camera project	210
Using Smart Proxy with the Multi-Camera Editor	210
Save and share	211
Choosing a sharing option	211
Saving to video files for computer playback	212
Saving to video files for mobile devices	213
Saving a track as an alpha channel video	214
Saving HTML5 video files	215
Uploading to the Web	216
Creating 3D video files	217
Creating video files from part of a project (trimmed)	219
Creating sound files	219
Working with custom profiles in the Share workspace	220
Burn discs	221
Saving a project to disc	221
Assembling files	223

Contents

	Adding and editing chapters	224
	Editing a menu template	226
	Creating advanced menus	228
	Previewing your movie and menu before burning	229
	Burning your project onto a disc	230
	Copying a disc image file	232
	Creating disc labels	232
G	Glossary	235
S	hortcuts	241
	Menu command shortcuts	241
	Workspace shortcuts	241
	Navigation area shortcuts	241
	Timeline shortcuts	242
	Multi-trim Video shortcuts	243
	Layout settings shortcuts	243
	Screen capture shortcuts	243
	Other Shortcuts	243
D	OV-to-DVD Wizard	245
	Scanning for scenes	245
	Applying templates and burning to DVDs	246

viii Corel VideoStudio



If you want to dive into Corel® VideoStudio® right away, this tutorial will walk you through the key tasks.

In this tutorial, you'll learn how to:

- Import video clips to the Library
- Add your clips and photos
- Review and trim your video clips
- Add titles
- Apply transitions
- Add music
- Save and share

The same basic steps can be applied to create a photo slideshow or any multimedia presentation that includes photos, video clips, and music.

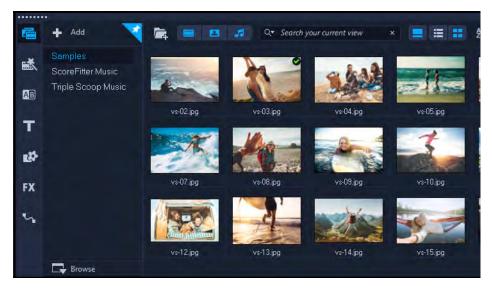
For a quick movie, try Corel® FastFlick®. For more information, see "FastFlick" on page 183. For more details about starting movie projects, see "Project basics" on page 41.

# Import video clips to the Library

Let's start with the most common situation—the shoot is done and you've transferred your video clips and photos from your camera to your computer. We can open Corel VideoStudio, and jump directly to the **Edit** workspace and the **Library**.

The **Library** is the source for all your media, including video clips, photos, and music. It also houses templates, transitions, effects, and a variety of other media assets that you can use in your projects.

Quick start 1



- 1 Click the **Edit** tab at the top of the application window to open the **Edit** workspace. The **Library** panel appears in the upper right corner of the application.
- Create a folder for your project to keep all your videos together by clicking the Add a new folder button + Add.
- **3** Type a name for the folder.
- 4 At the top of the **Library**, click the **Import Media Files** button , select the video clips and photos that you want to use, and click **Open**.

Note that the buttons at the top of the **Library** can be enabled and disabled to filter the thumbnails by video, photos, and music. If you don't see the media you expect to see, check the state of these media buttons.



# Add your clips and photos

Adding clips and photos to a video project is as easy as dragging thumbnails for the video clips and photos that you want to use from the **Library** to the **Timeline**.

If you're looking for a way to get polished results quickly, you can use an Instant Project template. For more information, see "Using Instant Project templates" on page 51.



#### Review and trim your video clips

The key to a successful video is to keep it short enough to hold your viewer's interest. Let's review and trim the video clips.

- 1 In the **Edit** workspace, click a video clip in the **Timeline**.
- 2 In the Navigation area of the Player panel, click Clip, and click the Play button.



**3** After you review the clip, drag the orange **Trim Marker** from the original starting position to the new starting position. The **Scrubber** moves to the selected frame and this frame displays in the **Preview Window**.



- 1. Trim Marker (one on each end). 2. Scrubber.
- **4** Now drag the second **Trim Marker** from the original end position to the new end position.
- 5 Click Play.

**Note:** Changes made to files imported into the **Library** do not affect the original files.

You can also trim video clips in the **Timeline** itself by dragging the end handles of a clip.



Quick start 3

Want to edit a section in the middle? Try **Multi-Trim Video**. For more information, see "Trimming video into multiple clips" on page 89.

#### Add titles

Now let's add a title.

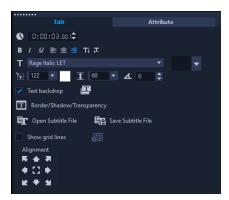
- 1 Drag the **Scrubber** to the position you want.
- 2 Click the **Title** button **T** to the left of the **Library** thumbnails.
- 3 You can type directly in the **Preview Window**, but the easiest way to get a professional-looking title, is to drag one of the title thumbnails from the **Library** to the **Title track** in the **Timeline**.



- **4** You can drag the title to any position in the **Title track** and adjust the duration of the title by dragging the end handles of the clip.
- 5 To edit the title text, double-click the title clip in the **Timeline**, in the **Preview Window**, select the text and type new text. Keep the text inside the box that displays near the edges of the **Preview Window** (called the Title Safe area).



**6** The **Options** panel displays to the right of the **Library** thumbnails. On the **Edit** page of the **Options** panel, use any of the controls to format your title text. For example, you can align the text and change the font, size, and color.



## **Apply transitions**

You can add transitions between clips or between photos. Transitions can be used to fade in or fade out or to dissolve one photo into the next. There are many transition options to choose from

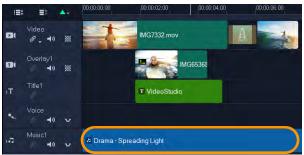
- 1 In the Library, click the Transition button ...
- 2 Click the **Gallery** drop-list at the top of the **Library**, and choose **All** if you want to see what is available.
- **3** Drag the thumbnail for the transition you want to the **Timeline** and place it between two clips or photos.



If you want to apply the same transition between all clips and photos in the track, in the **Library**, right-click the transition thumbnail, and choose **Apply current effect to video track**. You will be warned about replacing any existing transitions.

#### Add music

You can add songs from your computer by dragging a music file from the **Library** to the **Music track**. You can also use **Auto Music** to choose royalty-free music to your project.



- 1 On the **Timeline** toolbar, click the **Auto Music** button **3**.
- 1 In the **Auto Music** area that displays in the **Options** panel, experiment with different choices in the drop-lists and click **Play selected Song** to listen to the selection.
- 2 To add your selection to the **Timeline**, click **Add to Timeline**.
- 3 The music is added to the **Music track**, and as with other clips, you can drag it to a new position in the **Timeline** and trim it by dragging the end handles.
- 4 To fade the music at the end of your project, click the **Fade-out** button in the **Auto Music** area.

Note that with any audio clips, or video clips that include sound, you can control the volume of the clips. For more information about adjusting audio, see "Audio" on page 113.

Quick start 5

#### Save and share

When you're finished with your project, you can save it and share it in a variety of ways. For this tutorial, we'll upload it directly to the Web.

Before sharing, it's important to save a version of your project to the native \*.vsp format. This will give you maximum flexibility if you choose to edit your project later or if you want to output it to a different format.

- 1 Click the **Share** tab **Share** to view the **Share** workspace.
- 2 Click **File** > **Save**, choose a location from the **Save in** box, and type a name in the **File** name box.
- 3 To share your video on the Web, click the **Web** button , then click **YouTube**, **Flickr**, or **Vimeo**, and click **Log In** to sign in to your account or to create an account. After you sign in and approve the link between Corel VideoStudio and the account, choose the settings you want for your video upload and click **Start**.



Welcome to Corel VideoStudio, the surprisingly creative video-editing software that lets you produce impressive video projects, regardless of your skill level. Corel VideoStudio provides a complete set of tools for capturing, editing, and sharing your video, slideshow, and multimedia projects.



The availability of features depends on the version of the software that you have. For more information, please see www.videostudiopro.com/compare.

This section contains the following topics:

- What's new in Corel VideoStudio 2019?
- System requirements
- Supported file formats
- · Hardware acceleration
- Preparing for video editing
- Installing and uninstalling the application
- Starting and quitting the application
- Updating the application
- Corel Support Services
- About Corel

# What's new in Corel VideoStudio 2019?

New creative features as well as enhancements to favorite features means that you can create stunning videos faster in Corel VideoStudio. The key updates are listed below.

# **New! Video editing shortcuts**

In VideoStudio 2019, edit freely across 50 tracks, add or remove gaps in the main timeline, adjust your clip position with new hotkeys, or easily select and move a portion of your project along the timeline. Browse the library seamlessly with new search capabilities and enhanced flow between the library and editor. And, enjoy new custom motion flexibility and controls from within the editing suite. The entire toolkit is faster and far more accessible.

# **New! Streamlined Timeline editing**

The updated **Timeline** puts common editing controls at your fingertips and lets you customize the toolbar, providing instant access to the tools you love to use. Mute tracks

Welcome 7

directly on the **Timeline** and preview edits as you make any adjustments. Focus in on your edits and adjust the height of your timeline tracks with brand new controls. Making custom motions? You can now edit with new full screen editing windows to get even closer to the action.

# **New! Color Grading**

Set the mood and ambience of your video with powerful color correction and adjustment tools. Create a sunkissed look or a dark, cool-toned effect with a few adjustments. With VideoStudio Ultimate, advanced color controls let shift the colors and boost the saturation and luminance on a per-color basis. Fine tune each color with HSL tuning, tone curves, Look-Up Table (LUT) profiles, and more. Similar to LUT Profiles, custom presets let you save time and achieve more consistent results by saving your settings. For more information, see "Color tab" on page 75.

## **New! Morph and Seamless transitions**

The new **Morph Transition** lets you create a fun metamorphosis effect by analyzing the content in one clip and blending it into the content of the next clip. Or try new **Seamless** transitions to add excitement and energy to your cuts with motion-based transitions that blur the passage from one clip to the next, creating what is known as an invisible cut. For more information, see "Morph Transitions" on page 139 and "Seamless Transitions (Ultimate)" on page 141.

# **New! Dynamic Split Screen video**

Impress yourself (and others!) with fun and sophisticated dynamic Split Screen videos. New keyframe capabilities let you add motion to your split screen templates and showcase multiple videos simultaneously. Create custom, unique effects, adjust the opacity, import graphics, and so much more. For more information, see "Split screen video templates" on page 52.

# **Enhanced! Mask Creator (Ultimate)**

Now you can create text masks, a cool way to add a title or scene transition and have your video playing behind it. Or, try the new **Freehand tool** to precisely isolate and fill an area with a mask. For more information, see "Working with the Mask Creator (Ultimate)" on page 99.

# New! Alpha channel video export and import

Alpha channels let you save and import videos that include transparent areas. Now you can export and share animated lower-third graphics, titles, and more. For more information, see "Saving a track as an alpha channel video" on page 210.

## **Enhanced! Title editing and custom titles**

Create stunning titles with motion, text, and graphics with enhanced title editing. Or, leverage the enhanced **3D Title Editor**, exclusive to VideoStudio Ultimate, to control textures, lighting, motion, and more! No matter what you create, save custom titles in the Library to save time on future productions! For more information, see "Creating titles for the Library" on page 130 and "3D Title Editor" on page 133.

## **New! Tiny Planet and Rabbit Hole effects**

Travel around the world and create a one-of-a-kind video. Transform your 360 video footage into a spherical panorama, better known as a **Tiny Planet** or **Rabbit Hole** effect. This addition completes the VideoStudio 360 video editing suite and gives your audience a unique perspective in just a few clicks. Import your footage and start editing; trim your video, add music, add 360 titles, and more. Export your 360° video to playback on your virtual reality headset, upload directly to YouTube 360, or convert to standard video format to control the angles your audience can see. For more information, see "360 video" on page 107.

#### **New! Premium Effects (Ultimate)**

Take your video to the next level with hundreds of premium effects, exclusive to VideoStudio Ultimate 2019. This version steps up its game with new NewBlue Video Essentials 5 and myriad upgrades to popular effects like Boris Title Studio and ProDad, Vitascene V3 LE, Mercalli V4, and Adorage volume 13. Immediately recognize results beyond what you thought possible with premium effects. Apply one of hundreds of animated filters and templates, then customize for an even *more* powerful result. With video stabilization tools, color effects, and other engaging extras, VideoStudio Ultimate has what you need to take your video to the next level.

# **Enhanced! Speed and performance**

Edit smoother and render faster with enhanced flexibility that enables users to toggle between an on-board CPU and an independent one like CUDA! VideoStudio is optimized for the latest video hardware acceleration technologies from Intel and nVidia, which improves efficiencies and dramatically speeds up rendering to popular file formats—now with support to output video with Alpha channel. Plus, enjoy faster and smoother 4K editing and playback thanks to the innovative Smart Proxy technology. Original high resolution files are preserved for export, but you are able to work with smaller files to improve speed and performance.

# Enhanced! A complete video editing toolkit.

With VideoStudio 2019, we deliver a fun and easy video editor, along with the element of surprise when you find out just how much you can do! It's a software you can grow with; after you learn the basics you'll be well on your way to adding, customizing, and creating more

Welcome 9

advanced productions. We've also loaded your toolbox with a few great extras! Check out **Corel® FastFlick®**, and quickly create a slideshow in three easy steps. And, we've made **VideoStudio® MyDVD®** even better with this release, with a new, easy-to-use interface designed to assist in burning videos to disc with customizable menus. Last, but definitely not least, VideoStudio 2019 introduces new **MultiCam Capture™ Lite** to create engaging videos and record screen and webcam simultaneously, and then easily bring it all together with the MultiCam Editor. This tool is incredibly powerful, and extremely fun to play with!

# **Tutorials and learning materials**

Get help when you need it from within the VideoStudio Welcome Book! New tutorials for VideoStudio 2019 help users explore a wide range of helpful and inspirational tips designed for both new and advanced users. Search for keywords and topics in the help files or tap the VideoStudio community and ask a question to learn from users with more hands-on experience. Plus, your purchase includes a 10-day all-access pass from our friends at StudioBacklot.tv training to access video tutorials, content, and more! Best of all, grow with VideoStudio, there's always something new to learn and more to create.

# System requirements

For optimal performance of Corel VideoStudio, make sure that your system meets the recommended specifications. Note that some formats and features require specific hardware or software (as indicated).

- Internet connection required for installation, registration and updates. Registration required for product use. Digital download option available if optical drive is not available for installation.
- Windows 10, Windows 8, Windows 7, 64-bit OS
- Intel Core i3 or AMD A4 3.0 GHz or higher
  - Intel Core i5 or i7 1.06 GHz or higher required for AVCHD & Intel Quick Sync Video support
  - Intel Core i7 or AMD Athlon A10 or higher for UHD, Multi-Camera or 360° video
- 4 GB of RAM or higher, 8+GB highly recommended for UHD, Multi-Camera, or 360° video
- Graphics card with minimum of 256 MB VRAM, 512 MB or higher recommended for hardware decoding acceleration
- HEVC (H.265) support requires Windows 10, supporting PC hardware or graphics card and Microsoft HEVC video extension installed
- Minimum display resolution: 1024 x 768
- Windows-compatible sound card
- Minimum 8 GB HDD space for full installation

#### **Accessories**

DVD burner for creating DVD and AVCHD discs

#### **Input Options**

- Capture from DV, HDV and Digital8 camcorders or VCRs (requires a FireWire port)
- Capture from analog camcorders with compatible analog capture card
- Capture from USB capture devices, PC cameras, webcams
- Import from AVCHD and other file-based camcorders, digital still cameras, mobile devices and discs

Product specifications are subject to change without notice or obligation.

For more details, visit: www.videostudiopro.com

# Supported file formats

The supported file formats are listed below. Please review release notes for any updates to supported files or visit www.videostudiopro.com for the latest list in the system requirements section.

# **Import Formats**

- Video: AVCHD\* (.M2T/.MTS), AVI, DV, DVR-MS, HDV, HEVC\*\* (H.265), M2TS, M4V, MKV, MOD, MOV\*\*\* (H.264), MPEG-1/-2/-4, MXF, TOD, UIS, UISX, WebM, WMV, XAVC, XAVC S, 3GP, Non-encrypted DVD titles
- 360 Video: Equirectangular, Single Fisheye, Dual Fisheye
- Audio: AAC, Aiff, AMR, AU, CDA, M4A, MOV, MP3, MP4, MPA, OGG, WAV, WMA
- Image: CLP, CUR, DCS, DCX, EPS, FAX, FPX, GIF87a, ICO, IFF, IMG, JP2, JPC, JPG, MAC, MPO, MSP, PBM, PCT, PCX, PGM, PIC, PNG, PPM, PSD, PSPImage, PXR, RAS, SCI, SCT, SHG, TGA, TIF/TIFF, UFO, UFP, WBM, WBMP, WMF, 001, Camera RAW

# **Export Formats**

- Video: AVC, AVI, DV, HDV, HEVC\*\* (H.265), M2T, MOV, MPEG-1/-2/-4, UIS, UISX, WebM, WMV, XAVC S, 3GP
- Devices: Apple iPod/iPhone/iPad/TV, Android devices, Sony PSP/PS3/PS4, Nintendo Wii, Microsoft Xbox compatible formats, DV, HDV
- Disc: DVD, AVCHD, SD Card, Blu-ray (see below)
- Web: YouTube, Flickr, Vimeo
- Audio: M4A, OGG, WAV, WMA

Welcome 11

• Image: BMP, JPG

#### **Blu-ray Support**

- Requires purchase of a separate plug-in from within the product
- Requires Blu-ray Disc reader and/or burner
- \* AVCHD with AC3 audio is only supported on Windows 8 and 10
- \*\*HEVC (H.265) support requires Windows 10, supporting PC hardware or graphics card, and Microsoft HEVC video extension installed
- \*\*\*Support to import and output Alpha Channel videos

Product specifications are subject to change without notice or obligation.

#### Hardware acceleration

Depending on your hardware specifications, Corel VideoStudio lets you optimize the performance of your system by optimizing hardware acceleration. For example, you can take advantage of nVidia CUDA or Intel Quick Sync. Experiment with different settings to achieve optimal results.



Hardware decoder and encoder acceleration requires at least 512 MB of VRAM.

# To change hardware acceleration settings

- 1 Select Settings > Preferences [F6].
- 2 Click the **Performance** tab and select the following options under **Hardware** acceleration:
  - Enable Hardware Decoder acceleration enhances editing performance and improves clip and project playback by using video graphics acceleration technologies of the computer's available hardware
  - Enable Hardware Encoder acceleration improves the rendering time required for producing your movies. From the **Type** drop-list, choose an option.



If the feature is not supported by your system, some hardware acceleration options will be grayed out.

# Preparing for video editing

Video editing tasks require a lot of computer resources. Your computer must be properly set up to ensure successful capturing and smooth video editing. Below are some tips on how to prepare and optimize your computer before you launch Corel VideoStudio.

- It is recommended that you close other applications when working with Corel VideoStudio. To avoid interruptions while capturing, it is best to turn off any automatically launched software.
- If you have two hard drives in your system, it is recommended that you install Corel VideoStudio to your system drive (usually C:) and store captured videos on your other drive.
- It is recommended that you store video files on a dedicated hard drive.
- Increase the Paging File (Swap File) size to twice your amount of RAM.

When you are in Corel VideoStudio, you can choose settings that let you balance the quality of the playback and the speed of the application. For example, is your playback fast but fuzzy? Or is your playback too slow? The tips below can help you find the right settings in Corel VideoStudio.

- Clearer, higher quality playback is available if your computer system meets or exceeds the recommended system requirements. You can work with HD projects and you can preview your project in HD. For more information, see "Setting project properties" on page 42 and "Previewing your project or clips" on page 44.
- To speed up less powerful systems, consider using Smart Proxy and review the hardware acceleration options. For more information, see "Using Smart Proxy for a faster, smoother editing experience" on page 44 and "Hardware acceleration" on page 12.

# Installing and uninstalling the application

You can install Corel VideoStudio from a disc or from installation files that you download.

#### To install Corel VideoStudio

- 1 Close any open applications.
- 2 Insert the DVD in the DVD drive or double-click the associated .exe file that you downloaded.
  - If the disc-initiated setup does not start automatically, navigate to the DVD drive on your computer, and double-click **Setup.exe**.
- **3** Follow the instructions on your screen.
  - **Note:** In addition to Corel VideoStudio, you might be prompted to install supporting Windows extensions and third-party programs and drivers.

Welcome 13

#### To uninstall Corel VideoStudio

- 1 Open the Windows Control Panel.
- 2 In the **Programs** category, click the **Uninstall a program** link.
- 3 In the **Programs and Features** window, click **Corel VideoStudio 2019** in the list of applications.
- 4 Click Uninstall/Change.
- **5** Follow the instructions on your screen.

# Starting and quitting the application

You can start Corel VideoStudio from the Windows desktop or Start menu, and quit the program from the application window.

# To start the application

• From the Windows Start menu or Start screen, choose Corel VideoStudio 2019.

# To quit the application

• Click the **Close** button x in the upper-right corner of the application window.

# **Updating the application**

You can check for and install product updates. Updates provide important new information about your application.

# To update the application

• Choose Help > Check for Updates.

# **Corel Support Services**

Corel® Support Services can provide you with prompt and accurate information about product features, specifications, pricing, availability, services, and technical support options. For the most current information on available support and professional services for your Corel product, please visit www.corel.com/support.

# **About Corel**

Corel is one of the world's top software companies, boasting some of the industry's best-known graphics, productivity and digital media products. We've built a reputation for giving

customers more choice, and delivering solutions that are easy to learn and use. Our mission is simple: help people achieve new levels of creativity and productivity.

Corel's product lines include CorelDRAW® Graphics Suite, Corel® Painter®, Corel®PaintShop® Pro, Corel® VideoStudio®, MindManager®, Pinnacle Studio™, ReviverSoft®, Roxio Creator®, Roxio® Toast™ and WinZip®. For more information on Corel, please visit www.corel.com.

Welcome 15



You can learn how to use Corel VideoStudio in various ways: by searching the Help or the user guide, by accessing video tutorials in the Welcome tab, or by exploring the Corel website (www.corel.com).

This section contains the following topics:

- Documentation conventions
- Using the Help system
- Corel VideoStudio 2019 User Guide PDF
- Understanding VideoStudio terminology
- · Learning with video tutorials
- Using Web-based resources

# **Documentation conventions**

The following table describes important conventions used in the Help.

Convention	Description	Example
Menu >Menu command	A menu item followed by a menu command	Click Settings > Preferences > Edit.
drop-list	A list of options that drops down when a user clicks a down arrow button	Select a profile from the Profile droplist.
<b>₽</b>	A note containing information that is important to the preceding steps. It may describe conditions under which the procedure can be performed.	Enable Flatten audio and background video if your browser can only support a single track for audio and video.
ŷ	A tip containing suggestions for performing the preceding steps. It may present alternatives to the steps, or other benefits and uses of the procedure.	For best results, use a tripod when you shoot photos and videos that you want to use in your stop motion animation project.

# Using the Help system

The Help that is available from within the program is the most comprehensive source of information for Corel VideoStudio. The Help system provides two ways to find information. You can choose a topic from the Contents pane, or use the Search box to search for specific words and phrases. You can also print topics from the Help.

Learning resources 17

An Internet connection is required to view the Help. If you work offline on a regular basis, you can download a PDF copy of the information (**Help** > **User Guide** (**PDF**)).

## To use the Help system

- **1** Do one of the following:
  - Click Help > Help topics.
  - Press **F1**.
- 2 In the Help window, do one of the following:
  - Contents pane browse through topics in the Help
  - **Search** box search the full text of the Help for a particular word or phrase (enclosed in quotation marks). For example, if you are looking for information about a specific tool or command, you can type the name of the tool or command, such as **Trimming**, to display a list of relevant topics.

# Corel VideoStudio 2019 User Guide PDF

You can view the **Corel VideoStudio 2019 User Guide** PDF online or you can download it to your computer or tablet. At any time, you can print the pages you want. You can find the PDF in Help menu (**Help** > **User Guide (PDF)**).

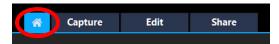
# Understanding VideoStudio terminology

Learn more about the language of video editing. We created a list of the most common video editing terms used in Corel VideoStudio to help you out. What is a scrubber and what does rendering mean? Find out by reading the "Glossary" on page 231.

# Learning with video tutorials

The **Welcome** tab includes access to learning material, such as video tutorials (English only for some video content), as well as free and paid content to help you expand your project options in VideoStudio.

The Welcome book is accessed from the **Welcome** tab. Click **Tutorials** to explore the collection of video tutorials. For more information, see "The Welcome book" on page 25.



You can also visit www.youtube.com/VideoStudioPro for more tutorials.

# To open the Discovery Center window

• Choose Help > Video Tutorials.

# **Using Web-based resources**

From the Corel VideoStudio Help menu and the Corel website, you can access a number of Web pages dedicated to customer support and communities. You can find resources such as tutorials, tips, newsgroups, downloads, and other online resources.

#### To access Corel VideoStudio Web resources

- Use your Internet browser to go to www.videostudiopro.com/learn for tutorials, community forums, and other resources
- Visit VideoStudio Facebook postings: https://www.facebook.com/corelvideostudio

Learning resources 19



Corel VideoStudio has three workspaces: Capture, Edit, and Share. These workspaces are based on the key steps in the video-editing process. The customizable workspaces let you rearrange the panels to suit your preferences and ensure that you have everything you need at a glance.

This section presents the following topics:

- Exploring the workspaces
- Switching between workspaces
- The Welcome book
- Using the Player panel
- Using the toolbar
- Customizing the workspace
- Changing the application language

# **Exploring the workspaces**

Corel VideoStudio Pro consists of three main workspaces, and a **Welcome** tab.

- Capture
- Edit
- Share

Each workspace contains specific tools and controls to help you accomplish the task at hand quickly and efficiently.

For more information about the **Welcome** tab, see "The Welcome book" on page 25.

You can customize the size and position of the elements on your screen for full control of your editing environment. For information about using a custom workspace layout, see "Customizing the workspace" on page 29.

# The Capture workspace

Media clips can be recorded or imported directly to your computer's hard drive. This step allows you to capture and import video, photo, and audio clips.

Workspace tour 21



The **Capture** workspace consists of the following components:

- **1. Menu bar** provides various commands for customizing Corel VideoStudio, opening and saving movie projects, working with individual clips, and more.
- **2. Preview Window** shows the current video being played in the Player panel.
- **3. Library panel** a storage depot for captured media clips.
- **4. Navigation area** provides buttons for playback and for precision trimming in the Player panel.
- **5. Information panel** lets you view information about the files you are working with.
- **6. Capture Options** displays different media capture and import methods.

# The Edit workspace

When you open Corel VideoStudio Pro, the **Edit** workspace appears as your default workspace. The **Edit** workspace and the **Timeline** are the heart of Corel VideoStudio Pro, where you can arrange, edit, trim, and add effects to your video clips.



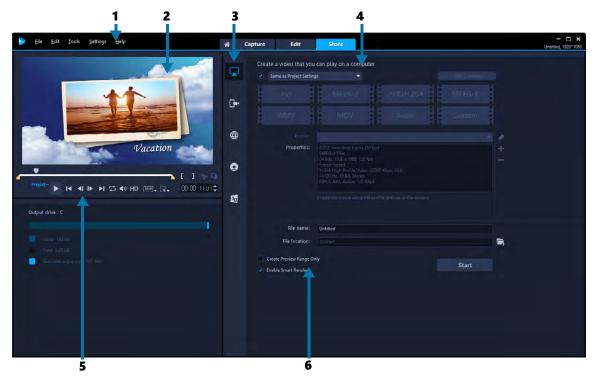
The **Edit** workspace consists of the following components:

- **1. Menu bar** provides various commands for customizing Corel VideoStudio, opening and saving movie projects, working with individual clips, and more.
- **2. Preview Window** shows the current video being played in the Player panel and lets you edit objects interactively.
- **3. Library panel** a storage depot for everything you need to create a movie, including sample video, photo, and music clips, and your imported clips. It also includes templates, transitions, titles, graphics, filters, and paths. The **Options** panel shares space with the **Library** panel.
- **4. Navigation area** provides buttons for playback and for precision trimming in the Player panel.
- **5. Toolbar** lets you choose from a variety of functions related to content in the **Timeline**.
- **6. Timeline panel** The **Timeline** is where you assemble the media clips for your video project. For more information, see "Timeline" on page 65.

# The Share workspace

The **Share** workspace lets you save and share your finished movie.

Workspace tour 23



The **Share** workspace consists of the following components:

- **1. Menu bar** provides various commands for customizing Corel VideoStudio, opening and saving movie projects, working with individual clips, and more.
- 2. Preview Window shows the current video being played in the Player panel.
- **3. Category selection area** lets you choose between Computer, Device, Web, Disc, and 3D movies output categories. For HTML5 projects, you can choose HTML5 and Corel VideoStudio project.
- **4. Format area** provides a selection of file formats, profiles, and descriptions. For Web sharing, it displays the settings for your account.
- **5. Navigation area** provides buttons for playback and for precision trimming in the Player panel.
- **6. Information area** lets you view the information about the output location and provides an estimate of the file size.

# Switching between workspaces

Corel VideoStudio simplifies the process of creating movies by organizing the controls you need into three workspaces that correspond to the different steps in the video-editing process.

Capture

Media clips can be recorded or imported directly to your computer's hard drive in the **Capture** workspace. This workspace allows you to capture and import video, photo, and audio clips.

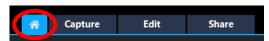
Edit	The Edit workspace includes the <b>Timeline</b> . This is the heart of Corel VideoStudio, where you can arrange, edit, trim and add effects to your video clips.
Share	The Share workspace lets you save and share your movie. You can save your video file, burn it to a disc, or upload it to the Web.

#### To switch between workspaces

- At the top of the application window, click one of the following tabs:
  - Capture
  - Edit
  - Share

# The Welcome book

The Welcome book is accessed from the **Welcome** tab.



In the Welcome book, you'll find

- Video tutorials
- Content offerings (free and paid)
- Update information
- Information about other resources

Review the Welcome book regularly to see what's new.

The Welcome book is set as the default tab when you open the application. You can adjust your default startup page in **Settings** > **Preferences**, and on the **General** tab, choose a **Default startup page**. Note that the Welcome book page might still display on startup if important updates are available.

# **Using the Player panel**

The Player panel consists of the Preview window and the Navigation area, which provides buttons for playback and for precision trimming of clips. Use the controls in the Navigation area to move around a selected clip or your project. Use the **Trim Markers** and **Scrubber** to edit your clips. In the **Capture** workspace, this panel also acts as the device control for a DV or HDV camcorder.

Workspace tour 25



The Player panel consists of the 1. Preview Window and the 2. Navigation area

The preview window in the Player panel is where you can interactively edit your project. The type of edits depend on the content and tool that you select.

# **Smart guides**

Smart guides are alignment lines that show automatically when you select and move objects in the preview window. For example, if you move text in the preview window, Smart guides help you identify the project center or edge, or the alignment relative to other objects.



Smart guides appear as red dashed lines to help you align the selected object in the Preview window.

# The Navigation area

The table below describes the controls available in the Navigation area.

	Part	Description
▼	Scrubber	Lets you scrub through the project or clip.
	Trim Markers	Lets you drag the scrubbers to set a preview range in the project or to trim a clip.
Project- Clip-	Project/Clip mode	Specifies a preview of the entire project or of a selected clip.

	Part	Description
<b>&gt;</b>	Play	Plays, pauses, or resumes the current project or a selected clip.
M	Home	Returns to the starting segment or cue.
<b>∢</b> I	Previous	Moves to the previous frame.
<b>I</b> ►	Next	Moves to the next frame.
►I	End	Moves to the end segment or cue.
#	Repeat	Loops playback.
<b>■</b> ()	System Volume	Lets you adjust the volume of your computer's speakers by dragging a slider.
HD.	HD Preview and 360 Preview drop-list	Lets you preview clips or projects in high definition (HD) or 360 degree (360).
16:9 <sub>▼</sub>	Change project aspect ratio	Lets you change the aspect ratio (updates the project settings).
□R.	Resize/Crop	Lets you access <b>Crop mode</b> and <b>Scale mode</b> (resize or distort).
00:00: I7. K\$	Timecode	Lets you jump directly to a part of your project or selected clip by specifying the exact timecode.
G	Enlarge Preview Window	Increases the size of the Preview Window.
40	Split Clip	Splits the selected clip. Position the <b>Scrubber</b> to where you want the clip to be split, and then click this button.
[	Mark-in and Mark- out	Sets a preview range in the project, or sets the start and end points for trimming a clip.

The **Play** button in the Navigation area serves two purposes: for playback of your entire project or a selected clip.

# To preview projects or clips

• Click **Project** or **Clip**, then click **Play**.



While working on your project, you will want to preview your work frequently to see how your project is progressing. **Instant Playback** allows you to quickly preview changes in your project. Playback quality will be dependent on your computer's resources.

Workspace tour 27



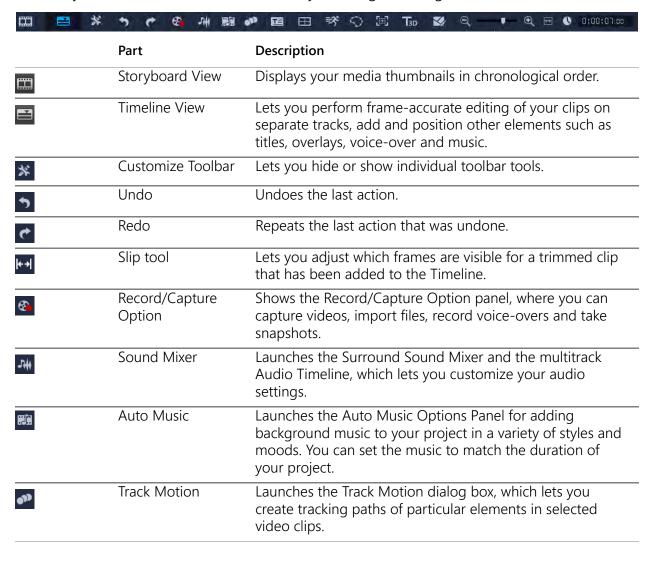
You may choose to play only a part of your project. The selected range of frames to preview is referred to as the **preview range**, and it is marked as a colored bar in the Ruler Panel.

## To play the trimmed range only

- 1 Use the **Trim Markers** or the **Mark-in/out** buttons to select the preview range.
- 2 To preview the selected range, select what you want to preview (**Project** or **Clip**), then click **Play**. To preview the entire clip, hold [**Shift**], then click **Play**.

# Using the toolbar

The toolbar provides easy access to many editing commands. You can change your project view, zoom in and out on the **Timeline**, and launch different tools that can help you edit efficiently. You can customize the toolbar by showing or hiding tools.



	Part	Description
區	Subtitle Editor	Launches the Subtitle Editor dialog box, which lets you detect and organize segments to easily add titles in selected video clips.
⊞	Multi-Camera Editor	Launches the Multi-Camera Editor and imports any of the selected media.
<b>=</b> 3°	Time Remapping	Launches the Time Remapping dialog box, which lets you use speed controls to slow down, speed up, reverse, or freeze frames in a video clip.
$\Diamond$	Mask Creator	Launches the Mask Creator dialog box, which lets you create video and still masks.
[::]	Pan and Zoom	
<b>T</b> 3D	3D Title Editor	
<b>₩</b>	Split Screen Template Creator	
<u>ද</u> භු	Zoom in and Zoom out	Lets you adjust your view of the <b>Timeline</b> by using the zoom slider and buttons.
<b>⊕</b>	Fit Project in Timeline Window	Adjusts your project view to fit the entire span of your Timeline.
<b>©</b> [0:00:08,00	Project Duration	Shows the total duration of the project.

#### To hide or show tools on the Timeline toolbar

- 1 In the Timeline, click the **Customize Toolbar** button **\***.
- 2 In the **Customize Toolbar** window, click the check boxes beside the tools to show (check mark) or hide (no check mark) tools on the toolbar.

# **Customizing the workspace**

The new workspace is designed to provide you with a better editing experience. You can now customize the size of the program window and change the size and position of the elements on your screen for full control of your editing environment.

Each panel behaves like an independent window that can be modified according to your editing preferences. This is very useful when you are using large displays or dual monitors.

Workspace tour 29



The main panels are:

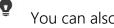
- 1. Player panel Contains the Preview Window and Navigation area.
- 2. Timeline panel Contains the Toolbar and Timeline.
- 3. Library panel Contains the media library and shares space with the **Options** panel.

#### To hide or show the Library and Options panel

- In the lower right corner of the **Library** panel, click one of the following buttons **I** 
  - Show Library panel
  - Show Library and Options panel
  - Show Options panel

## To move a panel

• Double-click the top-left corner of the **Player Panel**, **Timeline Panel** or **Library Panel**. When the panel is active, you can minimize, maximize, or resize each panel.



You can also drag the panel outside the main application window into the second display area for dual-monitor setups.

# To customize the size of the program window

- You can do one of the following:
  - Click the Restore button and drag the ends of the program window to the desired size.
  - Click the **Maximize** button for full screen editing.

#### To dock a panel

1 Click and hold an active panel. The docking guide appears.



2 Drag your mouse over the docking guide and choose a docking position to snap the panel in place.

#### To save a custom workspace layout

Click Settings > Layout Settings > Save to and click a Custom option.

#### To load a custom workspace layout

- Click **Settings** > **Layout Settings** > **Switch to** and choose **Default** or one of the custom settings you have saved.
  - To know more about hotkey combinations assigned for each preset, see "Layout settings shortcuts" on page 241.



You can also change the layout settings from the **UI Layout** tab in **Settings** > **Preferences**.

## To set program preferences

Click Settings > Preferences or press F6 to launch the Preferences dialog box.

# Changing the application language

You can change the application language of VideoStudio.

**Note:** If the language does not display as expected after you make the change in VideoStudio, check the following in Windows:

- Verify that the language you want to display is added in the Windows language settings (Windows Control Panel > Clock, Language, and Region > Add a language).
- For non-Unicode text, change the system locale.

Workspace tour 31

# To change the display language

• Click **Settings** > **Display Language**, and choose the language you want from the submenu.



Corel VideoStudio lets you capture or import video from DVD-video, AVCHD and BDMV discs including camcorders that record on memory cards, internal memory of discs, DV or HDV camcorders, mobile devices, as well as analog and digital TV capture devices.

This section contains the following topics:

- Using the Options panel in the Capture workspace
- Capturing videos and photos
- Capturing digital video (DV)
- Using DV Quick Scan
- Capturing analog video
- Importing from digital media
- Scanning and splitting scenes

# Using the Options panel in the Capture workspace

In the **Capture** workspace, Corel VideoStudio displays the **Library** and the capture **Options** panel where different media capture and import methods are available.

The table below discusses the options in the Capture workspace.

<b>D</b> į	Click <b>Capture Video</b> to import video footage and photos from your camcorder to your computer.
Dá	Click <b>DV Quick Scan</b> to scan your DV tape and select the scenes.
<b>@</b>	Click <b>Import from Digital Media</b> to add media clips from a DVD-Video, AVCHD, BDMV formatted disc or from your hard drive. This feature also allows you to import video directly from AVCHD, Blu-ray Disc or DVD camcorders.
<b>E</b>	Click <b>Stop Motion</b> to create instant stop motion animations using captured images from your photos and video capture devices.
<b>₽</b>	Click <b>MultiCam Capture</b> to create screen capture videos. You can also choose to capture your webcam and your screen at the same time (MultiCam Capture Lite version is limited to one camera device plus screen capture). Please see the Help within <b>MultiCam Capture Lite</b> for more information.

Capture and import 33

# Capturing videos and photos

The steps on how to capture are similar for all types of camcorders except for the available capture settings in the Capture Video Options panel that can be selected for each type of source.

The Capture Video Options panel consists of the following components:

- **Duration** Sets the length of time for the capture.
- **Source** Displays the detected capture device and lists other capture devices installed on your computer.
- **Format** Gives you a list of options where you select a file format for saving your captured video.
- File name Allows you to specify a prefix for captured files.
- Capture folder Allows you to specify a location for captured files.
- **Split by scene** Automatically separates captured video into several files based on changes in shooting date and time.
- Capture to library Choose or create a Library folder where you want your video to be saved.
- Options Displays a menu allowing you to modify your capture settings.
- Capture Video Transfers video from your source to your hard drive.
- Take a Snapshot Captures the displayed video frame as a photo.

## To capture video clips and photos from your camcorder

- 1 Connect your camcorder to your computer and turn on the device. Set it to **Play** (or **VTR** / **VCR**) mode.
- 2 In Capture Options Panel, click Capture Video.
- 3 Select your capture device from the **Source** drop-list.
- 4 Select a file format from the **Format** drop-list. In the **Capture** folder box, type a folder location or mark the **Capture to library** check box and choose a folder from the drop-list.

**Note:** Click **Options** to customize capture settings specific to your video device.

- **5** Scan your video to search the part for capture.
  - **Note:** If you are capturing video from a DV or HDV camcorder, use the Navigation area to play your video tape.
- 6 Click **Capture Video**, when your video for capture is already on cue. Click **Stop Capture** or press **[Esc]** to stop capturing.
- **7** To capture a photo from the video footage, pause the video on the desired frame then click **Take a Snapshot**.

**Note:** When your camcorder is in Record mode (usually named **CAMERA** or **MOVIE**), you can capture live video.

**Note:** The available settings in the **Video properties** dialog box vary, depending on the capture file format that you have chosen.

#### To capture videos and photos using a DSLR

- 1 Connect your DSLR to your computer and turn on the device.
- 2 Click Capture Video and select your device from the Source drop-list.
- 3 Specify a folder location for your saved files by clicking the **Capture Folder** button ...
- 4 Click **Capture Video** to start recording. Click **Stop Capture** or press **[Esc]** to stop capturing.
- **5** To capture a photo while the DSLR is connected to the computer, click **Take a snapshot**.

#### To capture video from an HDV camcorder

- 1 Connect your HDV camcorder to your computer's IEEE-1394 port using the IEEE-1394 cable.
- 2 Turn on your camcorder and switch it to **Play/Edit** mode and make sure that your HDV camcorder is switched to HDV mode.
  - **Note:** For Sony HDV camcorders, flip open the LCD screen and see if **HDVout I-Link** is on the LCD screen to check if the camera is set to HDV mode. If you see **DVout I-Link**, press **P-MENU** at the lower right of the screen. In the menu, press **MENU** > **STANDARD SET** > **VCR HDV/DV** and press **HDV**.
- 3 In the Capture workspace, click Capture Video .

# To capture DVB-T video

- In the Capture workspace, click Capture Video 
   Note: Before capturing, ensure that the DVB-T source is connected via a compatible capture card installed on your computer.
- 2 Select **Digital TV Source** from the **Source** drop-list.
- 3 Click **Options** and select **Video Properties**. The **Video properties** dialog box will appear.
- 4 In the Input Source tab, select TV from the Input source drop-list. Click OK.
- 5 In Channel List, click Start Scan to start scanning for channels.
  Note: DVB-T channels are not automatically scanned. Make sure to manually scan the channels first before capturing.
- 6 Click Capture Video.
- 7 Click **Yes** when prompted if you want to start capturing and automatically recovering DVB-T video.
- **8** Follow the remaining steps as described in the procedure for capturing videos.

Capture and import 35

#### To capture TV footage

- 1 Select your TV tuner device from the **Source** drop-list.
- 2 Click **Options** > **Video Properties** to open the **Video properties** dialog box. If needed, adjust the settings accordingly.
  - Click the **Tuner Information** tab to choose **Antenna** or **Cable**, scan available channels in your region, and more.
- 3 In the **Channel** box, specify the channel number from which to capture.

#### To capture video in MPEG-2 format

- 1 In **Source**, choose your video source.
- 2 Specify or browse for the destination folder where you want your clips to be stored in **Capture folder**.
- 3 Click **Options** and select **Video properties**. In the dialog box that opens, select a profile in the **Current Profile** drop-list.
- 4 Click OK.
- 5 Click **Capture Video** to start capturing and **Stop Capture** to end your capturing session. Your media clip will be stored as MPEG-2 format in the folder you specified.

# Capturing digital video (DV)

To capture Digital Video (DV) in its native format, select **DV** from the **Format** list in the Options Panel. This saves the captured video as a DV AVI file (.avi).



You can also use the **DV Quick Scan** option to capture DV video DV AVI Type-1 and Type-2.

When capturing DV, click **Options** in the Options Panel and select **Video properties** to open a menu. In the Current Profile, choose whether to capture DV as **DV Type-1** or **DV Type-2**.

# Using DV Quick Scan

Use this option to scan a DV device for scenes to import. You can add the date and time of your video.

For more information on this feature, see "DV-to-DVD Wizard" on page 243.

# To add the date and time of your video

After scanning your DV tape, click Next.
 This will then display the Import Settings dialog box.

2 Select Insert to Timeline and choose Add video date information as title.
Note: If you want the shooting date to appear for the duration of the video, select Entire video. If you only want a portion of the video, select Duration and specify the number of seconds.

# Capturing analog video

When footage is captured from analog sources such as VHS, S-VHS, Video-8, or Hi8 camcorders/VCRs, it is converted to a digital format that can be read and stored by the computer. Before capturing, choose the desired file format to use for saving the captured video in the Options Panel's **Format** list.

## To specify the type of video source you are capturing from

- 1 In the Capture workspace, click Options and select Video properties.
- 2 In the dialog box that opens, you can customize the following capture settings:
  - In the **Input Source** tab, choose whether you are capturing NTSC, PAL, or SECAM video and select the **Input source** (TV, Composite, or S-Video).
  - In the **Color Manager** tab, you can fine tune the video source to ensure good quality captures.
  - In the **Template** tab, choose the frame size and compression method to use for saving the captured video.

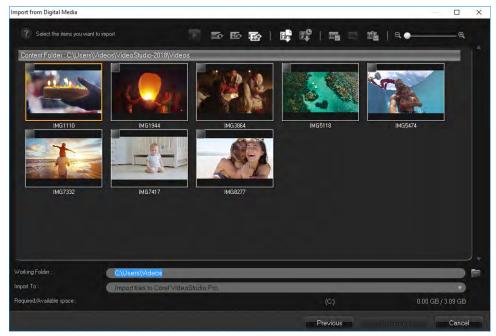
# Importing from digital media

You can import DVD, AVCHD, BDMV video and photos from a disc, hard drive, memory card and digital camcorders.

# To import digital media

- 1 In the Capture workspace, click Import from Digital Media.
- 2 Click **Select Import Source Folders** and browse for folders that contain your digital media and click **OK**.
- 3 Click Start and the Import from Digital Media dialog box appears.

Capture and import 37



**4** Choose the media clips you want to import and click **Start import**. All imported videos will be added to the thumbnail list in the **Library**.

#### To enable timecode retrieval for AVCHD

- 1 In the Capture workspace, click Import from Digital Media.
- 2 Select the file location from the **Select Import Source Folders** list and click **Start**.
- 3 Choose the media clips you want to import and click **Start import** to launch **Import Settings**.
- 4 In Import Destination, select Insert to Timeline or select Add video date information as title.
- **5** Choose **Entire video** to import the timecode of the video file as a title spanning the entire duration of the video. Choose **Duration** to import the timecode as a title within a specified duration. Click **OK** to apply the settings.

**Note:** You can apply the same settings to all the videos that you import and hide the **Import Settings** dialog box by marking the **Apply this setting and never ask me again** check box. You can also choose to enable the same check box on the **Capture** tab of the **Program preferences** dialog box. For more information, see "Customizing the workspace" on page 29.

# Scanning and splitting scenes

A single DV tape may contain video that was captured at different times. Corel VideoStudio automatically detects these segments and saves them as separate files.

## To find scenes in your video

• Drag the **Shuttle Slider** to move forward and back through the footage at variable speeds.



#### To use Split by scene

- 1 In the Capture workspace, click Capture Video.
- **2** Enable **Split by scene** on the Capture Video Options Panel. Corel VideoStudio will automatically look for the scenes according to their shooting date and time and capture them as separate files.

Capture and import 39



Corel VideoStudio combines the video, titles, sounds, and effects in a process called **rendering**. Project settings determine how your movie project is rendered when you preview it. The output video can then be played back on your computer, burned to disc, or uploaded to the Internet.

This section contains the following topics:

- Creating new projects and opening projects
- Setting project properties
- Creating custom profiles
- Using Smart Proxy for a faster, smoother editing experience
- Previewing your project or clips
- Undoing and redoing actions
- Showing and hiding grid lines
- Saving projects
- Saving projects by using Smart Package
- Adding cues and chapters

# Creating new projects and opening projects

When you start Corel VideoStudio, it automatically opens a new project and lets you start creating your movie. New projects are always based on the default settings of the application. You can also create HTML5 projects that you can post on the Web.

You can open previously saved projects and if you'd like to combine several projects, you can add previously saved projects to a new project.

## To create a new project

• Click File > New Project [Ctrl + N].

# To create a new HTML5 project

Click File > New HTML5 Project [Ctrl + M].

Project basics 41

#### To create a new FastFlick project

- 1 Click **Tools** > FastFlick.
- 2 From the FastFlick window, click **Menu** > **New Project**.

For more information, see "FastFlick" on page 183.

## To open an existing project

Click File > Open Project [Ctrl + O].

## To add an existing project to a new project

- 1 In the Library, click the **Media** button **=**.
- 2 Drag a project file (.vsp) from the Library to the Timeline.
  If the file isn't in the Library, click the Import Media Files button, navigate to a project file (stored in My Projects folder by default), select the file, and click Open.
  All tracks, media, and elements of the project appear in the Timeline.
- Before you import a project (VSP file) to the Library, ensure that all links in the project are working. Projects with linking issues cannot be added to existing projects.
- If you want to flatten the project to add it to a specific track, press and hold the **Shift** key before you release the mouse button.

# Setting project properties

**Project Properties** serve as your template for your movie projects. The project settings in the **Project Properties** dialog box determine the appearance and quality of a project when it is previewed on-screen.

The project properties are based on a profile. You can use an existing profile or create a custom profile. For more information about custom profiles, see "Creating custom profiles" on page 43.

# To modify project properties

- 1 Click Settings > Project Properties.
- **2** Choose the appropriate setting options in the **Project Properties** dialog box.
- 3 Click OK.



When customizing project settings, it is recommended that you make the settings the same as the attributes of the video footage that will be captured to avoid distorting the video images and can help prevent jumping frames. However, preview performance might decrease for projects with high resolution files, depending on the system specifications.

# Creating custom profiles

Profiles contain settings that define how to create the final movie file. By using the preset profiles provided by Corel VideoStudio or by creating and saving your own profiles in the **Movie Profile Manager**, you can have multiple versions of your final movie. For example, you can create profiles that provide high-quality output for DVD and video recording, and you can create profiles that output to smaller, lower-quality files ideal for Web streaming and e-mail distribution.

You can also choose profiles and create custom profiles in the **Share** workspace before you output your movie project. For more information, see "Working with custom profiles in the Share workspace" on page 216.

#### To create custom profiles

- 1 Click **Settings** > **Movie Profile Manager**. The **Movie Profile Manager** dialog box opens.
- 2 Click the **Computer** or **3D** tab.
- 3 From the Format drop-list, choose a file format.
- 4 Click New.
- 5 In the **New Profile Options** dialog box, click the Corel VideoStudio tab, and type a name in the **Profile name** box.
- 6 Click the General tab, and choose the settings you want.
  Note: Additional tabs and settings are available depending on the type of format you choose.
- 7 Click OK.

## To choose a custom profile for your project

- 1 Click Settings > Movie Profile Manager. The Movie Profile Manager dialog box opens.
- 2 Click the Computer or 3D tab.
- 3 From the **Format** drop-list, choose a file format.
- 4 In the **Profile** area, choose **Personal Profiles** from the drop-list.

  Previously saved custom profiles are listed in the box below the drop-list.
- **5** Click the profile you want, and click **Close**.

Project basics 43

# Using Smart Proxy for a faster, smoother editing experience

The main purpose of **Smart Proxy** is to provide a more fluid editing and previewing experience when working with large, high resolution video files.

**Smart Proxy** creates lower resolution working copies of larger source files. These smaller files are called "proxy" files. Using proxy files speeds up editing of high resolution projects (for example, projects that have HDV and AVCHD source files).

Proxy files are source-dependent rather than project-dependent. In other words, proxy files can be shared among different projects.

When you render a video project, the original, high-quality video source files are used.

You can use the **Smart Proxy Manager** to enable or disable **Smart Proxy**, change the default resolution threshold that enables **Smart Proxy**, and access the **Smart Proxy File Manager** and **Smart Proxy Queue Manager** to manage existing and future proxy files.

Smart Proxy can be set and adjusted in the VideoStudio workspaces or in the Multi-Camera Editor.

#### To enable or disable Smart Proxy

Click the Settings menu or button (Multi-Camera Editor)
 Enable Smart Proxy.

**Note:** The **Smart Proxy** feature is enabled by default if the computer's hardware can support the feature.

# To set the resolution threshold and location for Smart Proxy files

- 1 Select Settings > Smart Proxy Manager > Settings.
- 2 In the **Smart Proxy** dialog box, set a resolution threshold for the creation of proxy files and choose a proxy folder.

# To manage proxy files

- 1 Select **Settings** > **Smart Proxy Manager**, and choose one of the following options:
  - Smart Proxy File Manager Lists the source and proxy files. You can use this manager to delete proxy files you no longer need.
  - Smart Proxy Queue Manager Lists source files for which proxy files will be generated (according to the current settings)

# Previewing your project or clips

The **Play** button in the Navigation area of the Player panel serves two purposes:

- Playback your entire project
- Playback a selected clip

While working on your project, you will want to preview your work frequently to see how your project is progressing. **Instant Playback** allows you to quickly preview changes in your project. Playback quality depends on your computer's resources.

You may choose to play only a part of your project. The selected range of frames to preview is referred to as the **preview range**, and it is marked as a colored bar on the Ruler Panel.

If you have a high definition project (HD), you can enable **HD Preview** so that you can preview your project with a clearer, higher quality result. The speed depends on your system.



# To preview a project or clip

- 1 In the Navigation area of the Player panel, click **Project** or **Clip**.
- 2 Click Play.

**Note:** For **Clip**, only the currently selected clip plays.



If you want to preview a high definition project in full HD, enable the **HD Preview** button.

# To play part of a project or clip

- 1 Use the **Trim Markers** or the **Mark-in/out** buttons to select the preview range.
- **2** With the preview range selected, in the Navigation area of the Player panel, click **Project** or **Clip**.
- 3 Click Play.

# **Undoing and redoing actions**

You can undo or redo the last set of actions that you performed while working on your movie.

#### To undo the last action

• Click the **Undo** button 5 on the **Toolbar**.

Project basics 45

#### To redo the last undone action

• Click the **Redo** button on the **Toolbar**.



You can adjust the number of undo levels in the **Preferences** dialog box. You can also use the keyboard shortcuts **[Ctrl + Z]** and **[Ctrl + Y]** to undo and redo actions respectively.

# Showing and hiding grid lines

You can use grid lines to guide you when repositioning or resizing photos and videos. You can also use grid lines to line up titles in your movie.

#### To show grid lines

- 1 In the **Edit** workspace, double-click a clip to display the **Options Panel**.
- 2 Click the **Effect** tab.
- 3 Check Show grid lines.





Click the **Grid line options** button at to adjust grid line settings.

# Saving projects

You can save projects so that you can edit or complete them later. To protect your work, you can enable automatic saving at regular intervals.

# To save your project

• Click **File** > **Save** [Ctrl + **S**].

**Note:** Corel VideoStudio project files are saved in \*.vsp file format. HTML5 video projects are saved in \*.vsh file format.

#### To automatically save your work

- 1 Click **Settings** > **Preferences** and click the **General** tab.
- 2 Choose **Automatic save interval:** and specify the time interval between saves. **Note:** This setting is set at 10 minutes by default.



Save your project frequently to avoid accidental loss of work.

# Saving projects by using Smart Package

Packaging a video project is useful if you want to back up your work or transfer your files for sharing or for editing in a laptop or another computer. You can also package your project as a zipped folder or prepare them for online storage using WinZip's file compression technology that is integrated into the Smart Package feature.

## To save projects by using Smart Package

- 1 Click File > Smart Package and choose to pack your project as a folder or Zip file.
- 2 Specify the Folder path, Project folder name and Project file name.

  If you want to include tracker or disc settings, enable the corresponding check box.
- 3 Click OK.



You need to save your project before you use Smart Package.

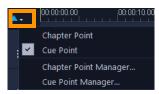
# Adding cues and chapters

Adding cues and chapters helps you to navigate through a project and allows you to place comments on your **Timeline**. These cue and chapter marks are used mainly as project guides or disc menu chapters and interactive links in HTML5 projects.

Cue points serve as markers that help in lining up media clips in a project. Chapter points specify disc menu chapters or hyperlinks.

## To add project cues

1 Click the **Chapter/Cue Menu** arrow (small grey triangle).



2 Click Cue Point.

Project basics 47

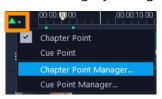
**3** Drag the cursor to where you want to add a cue point and click the bar below the **Timeline** ruler. Notice that a blue arrow icon is added.



- **4** To edit a cue point, click the **Chapter/Cue Menu** arrow, and click **Cue Point Manager**. You can add, delete, rename, and navigate (Go To) cue points.
  - To remove chapters and cues, drag the markers outside the **Timeline** ruler and release the mouse button. You can also drag the **Timeline** ruler to a chapter or cue point and click **Add/Remove Chapter Point** or **Add/Remove Cue Point** (the green or blue triangle to the left of the **Chapter/Cue Menu** arrow).

#### To add chapters

1 Click the Chapter/Cue Menu arrow (small grey triangle).



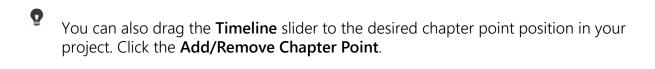
- 2 Click Chapter Point.
- 3 Drag the cursor where you want to add a chapter and click the bar below the **Timeline** ruler. Notice that a green arrow icon appears to indicate chapter points in your movie. If you want to reposition the chapter point, drag it to the position you want.



a chapter click the Chapter/Cua Manu arrows

**4** To edit a chapter, click the **Chapter/Cue Menu** arrow, and click **Chapter Point Manager**. You can add, delete, rename, and navigate (Go To) chapter points.

To remove chapters and cues, drag the markers outside the **Timeline** ruler and release the mouse button. You can also drag the **Timeline** ruler to a chapter or cue point and click **Add/Remove Chapter Point** or **Add/Remove Cue Point** (the green or blue triangle to the left of the **Chapter/Cue Menu** arrow).



Project basics 49



Templates let you fast track your projects. You can use ready-made templates, or you can create your own.

This section contains the following topics:

- Using Instant Project templates
- Split screen video templates

# **Using Instant Project templates**

Instant Project templates let you fast-track the movie creation process by providing you with pre-assembled movie projects. Simply exchange the placeholder clips and photos with your own media and you're done. They are also a great way to learn about the components of a movie project.

You can use one template for the entire movie, or you can add more than one template. For example, you can use different templates for the start, middle, and end of your movie. You can even create and save custom templates. For example, if you are creating a series of videos, you can create a template so that all the videos have a consistent style.

# To open an Instant Project template

- 1 In the **Edit** workspace, click the **Instant Project** button **in** the **Library** panel.
- 2 Click a template category from the folders that appear (not Split Screen).



- 3 To preview a template, click the template thumbnail, and click the Play ▶ in the Player panel.
- 4 Right-click the template thumbnail and choose the point of insertion in the **Timeline** between **Add at the beginning** and **Add at the end**.

  The template is added to the **Timeline**.

Templates 51

**Q** 

You can also add a template to your project by dragging the thumbnail to the **Timeline**.

#### To replace clips, photos, and music in an Instant Project template

- 1 Drag a clip, photo, or music track from the **Library** to the appropriate placeholder clip, photo, or music track.
- 2 Press [Ctrl] and release the mouse button.

#### To create an Instant Project template

- 1 Open the video project that you want to save as a template.
- 2 Click File > Export as template > Instant Project Template.
- **3** Click **Yes** when prompted to save your project.
- 4 Enter a File name, Subject and Description.
- **5** Browse for the folder where you want to save your template and click **Save**.
- 6 In the **Export project as template** dialog box, move the slider to display the thumbnail that you want to use for the template.
- 7 Specify the path and folder name. Choose the category from the drop-list where you want to keep your template.
  Template details will also be displayed.
- 8 Click OK.

## To import project templates

- 1 Click **Import a project template** and browse for the \*.vpt file that you want to import.
- 2 Click Open.

# Split screen video templates

You can easily create a split screen video in VideoStudio to play multiple videos in a preset or customized template. Custom options include keyframes to help you create dynamic templates that include motion.



You can use a template to create a split screen video project or create your own split screen template.

#### Before you start

- Ensure that the video clips you want to use are imported to the **Library** and easy to access from a project bin or collection.
- Preview the video clips you want to use so that you have an idea what shapes will suit the content that you want to focus on. For example, if the main action is vertical, it won't fit a horizontal shape very well.

## To choose and fill a split screen template

- 1 In the **Edit** workspace, click the **Instant Project** button **in** the **Library** panel.
- 2 Click **Split Screen** in the list of folders that appear.
- **3** Drag the thumbnail for the template that you want to use into the **Timeline**.
- **4** Drag a video or photo from the **Library** to the appropriate placeholder, and press **Ctrl** to replace the placeholder.
- 5 In the **Player** panel, click the **Resize/Crop** drop-down and enable the **Scale** mode (button is blue when mode is active). Do any of the following:
  - Resize the selected clip by dragging the sizing orange nodes that appear in the preview window.
  - Position the clip by dragging it in the preview window.
- 6 In the **Timeline**, click another track to adjust the other clips in the template.

## To create a split screen template

- 1 On the **Timeline** toolbar, click the **Split Screen Template Creator** button **S**.
- 2 In the **Template Editor**, choose a tool from the **Splitting Tools** panel, and drag in the editor window to split the area into different clip zones.

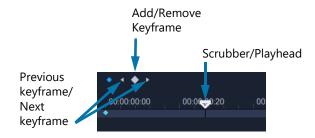
Templates 53



A number appears in each clip zone.

If you want to add a shape, in the **Graphics** area, click a shape and drag in the editor window.

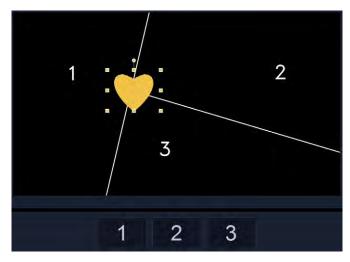
- 3 To adjust the lines and shapes, in the **Splitting Tools** panel, choose the corresponding **Select** tool, and select the element that you want to edit in the editor window. You can drag the lines and shapes to reposition them and resize them. You can also adjust the **Rotation**, **Border width**, and **Border color**, and **Opacity** in the **Properties** area.
- **4** To add motion to your template, use the scrubber and keyframe controls at the bottom of the window to add keyframes and assign new property settings and/or move the template elements. Use the playback controls to review the motion.



5 If you want to save content with your template (for example, an image or video that will be part of the template), using the panel on the left-side of the window, navigate to the content you want to add and drag the corresponding thumbnail to the number you want in the drop zone.

**Note:** To replace the content, drag different content to the drop zone.

**Note:** Sizing and positioning of content can be done in the **Timeline** after you close the **Template Creator** window.



- 6 When your template is complete, click the **Export as template** button to save your template. Your template is saved in the **Library** to the **Instant Project** category, **Split Screen** folder.
- 7 Click **OK** to return to the **Timeline**.
- 8 Add and edit the clips as you would with an existing template.

Templates 55



Organize the media clips in the Library so you can access assets for your projects with ease and speed. You can also import a Library to restore media files and other library information.

This section contains the following topics:

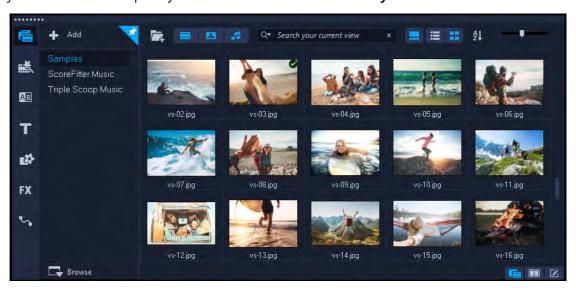
- Using the Library
- Sorting, viewing, and filtering clips in the Library
- Searching the Library
- · Resizing thumbnails
- Tagging files as 3D

# **Using the Library**

The **Library** is a storage depot for everything you need to create a movie: video clips, photos, audio files, instant project templates, transitions, titles, filters, graphics, and tracking paths.

Create a custom library for your project. You can select, add, and delete media in the **Library**. If the media files are moved from their original location, you can automatically restore the links. Remember to export the library to create a backup on the hard drive or an external storage device. You can then import the library at a later time.

After completing a project, you can reset the **Library** to restore the default media clips. The files you added will be deleted from the **Library**, but not from their original location. You can always choose to re-import your media files into the **Library**.





Right-click a clip in the **Library** to view the clip's properties as well as copy, delete, or split clips by scene.

You can also trim a clip in the **Library** by using dragging the **Scrubber** in the Player panel to set the **Mark-in/Mark-out** points.

Library files that you use in a project are identified by a green check mark in the upper right corner of the thumbnail.



For information about supported media formats, see "Supported file formats" on page 11.

#### To select media in the Library

- In the **Library**, do one of the following:
  - Select one media file click a thumbnail.
  - Select multiple media files press and hold [Ctrl], and then click the thumbnails you want.
  - Select a sequence of media files click the first thumbnail in the sequence, press and hold [Shift], and then click the last thumbnail in the sequence.
  - Select a grouping of media files drag your pointer across the thumbnails that you want to select.

## To add media clips to the Library

- 1 Click **Add** to create a new library folder where you want to store your media clips. **Note:** You can create custom folders to separate your personal clips from sample clips or to keep all clips that belong to a project in a single folder.
- 2 Click the **Import Media Files** button **t** to locate your files.
- 3 Select the files you want to import.
- 4 Click Open.



Click **Browse** to open the **File Explorer** where you can drag and drop files to the **Library**.

# To delete media clips from the Library

1 In the Library, select a clip and press [Delete].

Or, right-click the clip in the **Library** and click **Delete**.

**Note:** While the clips are referenced in the **Library**, they actually remain in their original location, so when you delete a clip from the **Library**, only the reference is deleted. You can still access the actual file in the location where it is stored.

2 When prompted, confirm that you want to delete the thumbnail from the **Library**.

#### To automatically locate and restore links to media files

Click File > Relink.

A message appears that notifies you about the number of clips that are successfully relinked.

**Note:** If the links to some clips are not restored, you can restore them manually by browsing for the corresponding file on your computer.

#### To export a library

- 1 Click **Settings** > **Library Manager** > **Export library** and specify a folder location where you want to save your **Library**.
- 2 Click OK.



This action creates a backup of the virtual media file information of your current library in the directory you specify.

# To import a Library

- 1 Click on **Settings** > **Library Manager** > **Import Library** and find the folder that you want to import.
- 2 Click OK.

# To reset the Library

• Click Settings > Library Manager > Reset Library.



This action restores the **Library** to the default settings and deletes all user added files.

# Sorting, viewing, and filtering clips in the Library

There are different ways to sort, search, view, and filter your media clips in the Library:

- Sort media by properties such as name, file type, date, and resolution.
- View media as thumbnails or as a list that includes details about the files.
- Filter media by hiding or showing media by type—photos, videos, and audio

#### To sort media clips

• Click the **Sort clips in the Library** button **[37]**, and select a **Sort by** property in the menu.

#### To change the media clips view

Click the List view button to display your media clips in a list that includes file properties, or click the Thumbnail view button to display thumbnails.
 If you want to sort the media clips in List view, click a property title, such as Name, Type, or Date.

You can also click the **Show/Hide title** button to show or hide the file names of the media clips.



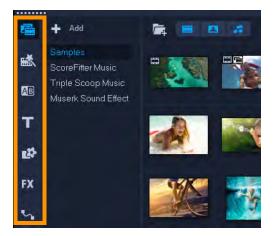
List view shows properties such as file name, media type, date, duration, resolution, frames per second (FPS), and codecs.

## To show or hide media clips

- Click one or more of the following buttons:
  - Show / Hide Videos
  - Show / Hide Photos
  - Show / Hide Audio Files

# To change the Library panel view

• You can use the icons in the **Library** panel to display Instant Project templates, transitions, titles, graphics, filters, and tracking paths.



# Searching the Library

You can use the **Search** box in the **Library** to find specific media and other **Library** assets, such as transitions, titles, graphics, or effects.



## To search the Library

- 1 In the **Library** panel, choose the category of assets that you want to display.
- 2 In the **Search** box, type the name of the file you want to find or a file type.

  If you want to set conditions for the search, click the **Search** icon , and choose **Match** any words or **Match** all words from the menu.

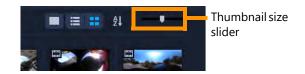


The results display in the **Library** panel.

**Note:** You must clear the **Search** box to restore your view of all assets. Click the **Clear Search** button (X) on the right side of the **Search** box.

# Resizing thumbnails

Corel VideoStudio allows you to adjust the size of thumbnails for easier access to the different media clips in the **Library**.



#### To adjust thumbnail size

• Move the slider to the left or right to decrease or increase thumbnail size.

# Tagging files as 3D

In Corel VideoStudio, MVC and MPO clips are automatically detected and tagged as 3D during import. You can also tag 2D clips to simulate the 3D effect when you render the project as a 3D movie. Tagged 3D media clips are marked with **3D** for easy identification and to enable the 3D media clip for 3D editing.

The **Left-Right** format for side-by-side 3D is a popular choice for delivering content and is used mostly in media clips imported or captured from 3D video cameras. The **Right-Left** option is used mostly in media clips acquired from the Web.

#### To tag video and photo clips as 3D

1 Right-click 3D files imported into the **Library** or the **Timeline** and choose **Tag as 3D** from the right-click menu. The **3D Settings** dialog box is displayed.



- **2** Choose one of the following options to set the correct format for 3D content:
  - 2D the default setting if the selected clip is not recognized as 3D.

- **Side-by-side** delivers 3D content by splitting the horizontal resolution of each frame for the left and right eye. Side-by-side 3D is widely used by cable channels for delivering content for 3D ready TV sets because of lower bandwidth usage. Choose between the **Left-Right** and **Right-Left** formats.
- Over-Under delivers 3D content by splitting the vertical resolution of each frame for the left and right eye. The higher count of horizontal pixels makes this option more suitable for displaying panning motion. Choose between the Left-Right and Right-Left formats.
- **Multiview Video Coding** (MVC) generates a high-definition two-view (stereoscopic) video or a multi-view 3D video.
- **Multi-view image** delivers high-quality stereoscopic images such as Multi-Picture Object (MPO) files that are shot using 3D cameras.

#### 3 Click OK.

The thumbnail of the media clip in the **Library** and **Timeline** now has the 3D tag.



The Timeline is where you assemble the media clips for your video project.

This section contains the following topics:

- Switching between Timeline views
- Showing and hiding tracks
- Adding and swapping tracks
- Renaming tracks
- Adjusting track height
- Grouping and ungrouping
- Using Ripple Editing mode

## Switching between Timeline views

Two types of views are available in the Timeline: Storyboard View and Timeline View.

### **Storyboard View**

The fastest and simplest way to organize photos and video clips in a project is to use the Storyboard View. Each thumbnail in the storyboard represents a photo, video clip, or a transition. Thumbnails are shown in the order in which they appear in your project, and you can drag thumbnails to rearrange them. The duration of each clip is shown at the bottom of each thumbnail. In addition, you can insert transitions between video clips, and you can trim a selected video clip in the Preview Window.

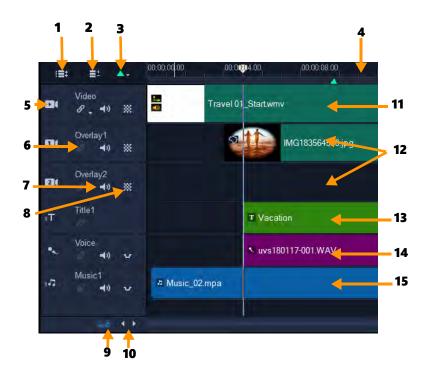


Corel VideoStudio Storyboard View

#### **Timeline View**

Timeline View gives you the most comprehensive display of the elements in your movie project. It divides a project into separate tracks for video, overlay, title, voice, and music.

Timeline 65



Corel VideoStudio Timeline View

Part	Description
1 — Show All Visible Tracks	Displays all tracks in your project.
2 — Track Manager	Lets you manage the tracks visible in the <b>Timeline</b> .
3 — Add / Remove Chapter or Cue	Lets you set chapter or cue points in your movie.
4 — Timeline ruler	Helps you determine clip and project length by displaying the project's timecode increments in hours:minutes:seconds:frames.
5 — Track button	Shows / Hides individual tracks.
6 — Enable / Disable Ripple Editing	When enabled, clips maintain their relative positions when a clip is added to the track. For more information, see "Using Ripple Editing mode" on page 70.
7 — Mute/Unmute	Lets you mute or unmute the audio for the track.
8 — Track Transparency	Opens Track Transparency mode. See "Track transparency" on page 104.
9 — Automatically scroll Timeline	Enables or disables scrolling along the <b>Timeline</b> when you preview a clip that extends beyond the current view.
10 — Scroll controls	Lets you move around your project by using the left and right buttons or dragging the <b>Scroll Bar</b> .
11 — Video Track	Contains videos, photos, graphics, and transitions. Note that in HTML 5 mode, you can also have a Background Track.
12 — Overlay Tracks	Contains overlay clips, which can be video, photo, graphic, or color clips. Note the HTML 5 projects also have overlay tracks.
13 — Title Track	Contains title clips.

Part	Description
14 — Voice Track	Contains voice-over clips.
15 — Music Track	Contains music clips from audio files.



You can use the mouse wheel to scroll through the Timeline.

Right-click on any track button and choose **Select all media** to select all media clips that are in the track.



When the pointer is at the **Zoom controls** or **Timeline ruler**, you can use the mouse wheel to zoom in and out of the **Timeline**.

#### To switch between Storyboard View and Timeline View

Click the buttons at the left side of the Toolbar.



# Showing and hiding tracks

You can show or hide tracks. When tracks are hidden, they do not show during playback or when you render your video. Selectively showing or hiding tracks lets you see the effect of each track in a project without having to delete and reimport media clips repeatedly.

#### To show or hide tracks

• Click the **Track button** of the track that you want to show or hide. The track is dimmed in the Timeline when it is hidden.

# Adding and swapping tracks

The **Track Manager** allows you to take more control of the **Timeline**. You can have up to 49 Overlay tracks, two Title tracks, and eight Music tracks.

In an HTML5 project, you can have up to three Background tracks, 47 Overlay tracks, two Title tracks, and three Music tracks.

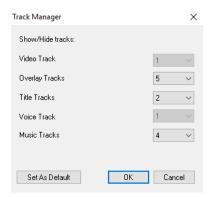
There is only one Video track and one Voice track.

You can also insert and delete additional overlay, title, and music tracks, as well as swap overlay tracks directly in the Timeline.

Timeline 67

#### To add tracks with the Track Manager

- 1 Click **Track Manager** on the Toolbar.
- 2 Specify the number of tracks you want to display from the drop-down list for each track.





Click **Set as Default** to save current settings as defaults for all new projects. You can also reduce the number of optional tracks that you have added by adjusting the **Track Manager** settings

#### To insert or delete tracks in the Timeline

- 1 In the **Timeline**, right-click a track button for a track type that you want to insert or delete, and choose one of the following menu commands:
  - Insert Track Above Inserts a track above the selected track
  - Insert Track Below Inserts a track below the selected track
  - **Delete Track** Removes the track from the Timeline

A track of the same type is inserted or the selected track is removed.



The menu items listed above appear only if the action is permitted. For example, **Delete Track** is not available if you have not added optional tracks in the project. Similarly, if you already have the maximum number of tracks for the selected track type, the insert track menu commands do not display.

## To swap Overlay tracks

- 1 Right-click on the Overlay track head area, and select **Swap Tracks**.
- **2** Choose the corresponding Overlay track that you want to swap. All media in the selected Overlay tracks swap.



This feature only works if you are working on projects with multiple Overlay Tracks.

# Renaming tracks

You can rename tracks to give them meaningful names to help you organize your project.

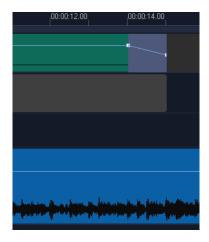


#### To rename a track

- 1 In the Timeline, click the name of the track listed in the track header.
- 2 When the insert text cursor appears, type a new name for the track.

# Adjusting track height

You can adjust the height of individual tracks. For example, you can increase the height of the track that you are working on to make the content more visible. For example, if you have the Sound Mixer mode enabled, a wider track lets you more easily view the waveform and adjust sound level nodes.



The height of the blue track at the bottom has been increased.

## To adjust track height

- 1 In the Timeline, position the pointer along the bottom edge of the track that you want to adjust.
- 2 When the double arrow displays, drag to increase or decrease the track height. **Note:** There is a minimum track height.
- •

The scroll bar along the right edge of the Timeline becomes active if the tracks exceed the space available in the Timeline panel.

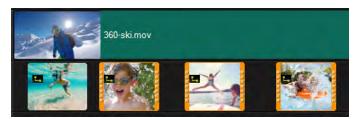
Timeline 69

# **Grouping and ungrouping**

You can group and ungroup items that are in the timeline. For example, you can select multiple clips or photos from one or more tracks and group them so that you can move them all at the same time or apply an effect to the group. You can ungroup the elements at any time.

#### How can you tell if an item is part of a group?

When you click an item that is grouped in the Timeline, all items in the group appear highlighted (orange outline).



When you click a grouped item in the Timeline, all items in the group appear highlighted (orange outline).

### To group items in the Timeline

- 1 In the **Edit** workspace, ensure that the items you want to group have been added to the Timeline.
- 2 Hold **Shift**, and in the Timeline, click all the items that you want to group.
- 3 Right-click a selected item and choose **Group** from the context-menu.

## To ungroup items in the Timeline

1 In the Timeline, right-click one of the grouped items and choose **Ungroup** from the context-menu.

# **Using Ripple Editing mode**

Use **Ripple Editing** mode to maintain the original synchronization of tracks when moving, inserting, or deleting clips.

For example, if you add a 10-second clip at the beginning of the **Video** track, the other clips move to the right by 10 seconds. This makes editing more efficient by keeping all tracks synchronized.



Original Timeline



Ripple Editing off: When a clip in the Video track is moved, the other tracks remain unchanged.



Ripple Editing on: When a clip in the Video track is moved, the clips in all other tracks that have Ripple Editing enabled are moved to maintain synchronization.

# To use Ripple Editing

- 1 In the **Timeline**, click the **Enable/Disable Ripple Editing** button in the **Video** track header area.
  - The button changes to blue when **Ripple Editing** is active.
- 2 Click the **Enable/Disable Ripple Editing** button on the header of each track that you want to keep synchronized with the **Video** track.
  - **Note:** You can turn Ripple Editing mode off at any time by clicking the **Enable/Disable Ripple Editing** button for individual tracks, or by clicking the arrow next to the button on

Timeline 71





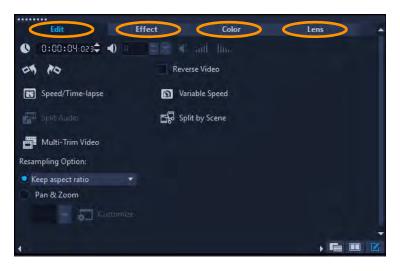
Videos clips, photos and audio clips are the foundation of your project and manipulating them is the most important skill you can master.

This section contains the following topics:

- Using the Options panel in the Edit workspace
- Converting multiple files
- Adding video clips
- Adding photos
- Moving clips in the Timeline
- Rotate a video or photo
- Crop a video or photo
- Resizing/scaling a video or photo
- Time remapping
- · Modifying video playback speed
- Using Freeze Frame
- Replacing media clips
- Trimming a clip
- Using the Slip tool to adjust trimmed clips
- Using Split by Scene
- Trimming video into multiple clips
- Saving trimmed clips
- Taking a snapshot from a video clip
- Adjusting the color and tone of clips
- Adjusting white balance
- Color grading with lookup tables (LUT profiles)
- Tone Curve
- HSL Tuning
- Lens Correction
- Pan and zoom for video and photos
- Working with the Mask Creator (Ultimate)
- Track transparency

# Using the Options panel in the Edit workspace

The **Options** panel in the **Edit** workspace allows you to modify the media, transitions, titles, graphics, animation, and filters that you add to the **Timeline**. The controls available depend on the type of media that you select and whether the media is in an overlay track or the main video track.



#### Edit tab

- **Duration** Displays the duration of the selected clip in hours:minutes:seconds:frames. You can trim the selected clip by changing the clip duration.
- Clip volume Allows you to adjust the volume of the audio segment of your video.
- Mute Silences the audio segment of your video without deleting it.
- **Fade-in/out** Gradually increases/decreases the volume of the clip for a smooth transition. Select **Settings** > **Preferences** > **Edit** to set the fade-in/out duration.
- Rotate Rotates the video clip.
- **Reverse video** Plays the video backward.
- **Speed/Time-lapse** Allows you to adjust the playback speed of your clip and apply Time-lapse and Strobe effects.
- Variable Speed Allows you to adjust the playback speed of a clip at different intervals.
- Split Audio Allows you to separate the audio from a video file and place it on the Voice Track.
- **Split by Scene** Splits a captured DV AVI file based on the shooting date and time, or the changes in video content (i.e., motion change, camera shifting, brightness change, etc.).
- Multi-Trim Video Allows you to choose desired segments from a video file and extract them.
- **Resampling Option** Allows you to set the aspect ratio for the video.

#### Color tab

- Basic: Allows you to Select preset to choose from a list of color/tone presets or choose a custom preset that you have saved. In the Color Correction area, choose from Hue, Exposure, Contrast, Gamma, Blacks, Shadows, MidRange, Highlights, Whites, Vibrance, Saturation, Clarity and Haze adjustments. You can also use the White Balance feature to make auto tone adjustments. For more information, see "Adjusting the color and tone of clips" on page 91, "Adjusting white balance" on page 92.
- Tone Curve: For information, see "Tone Curve" on page 94.
- **HSL Tuning**: For information see "HSL Tuning" on page 95.
- **LUT Profile**: For information see "Color grading with lookup tables (LUT profiles)" on page 93.

#### Lens tab

Lets you access presets and controls for correcting distortion caused capturing footage with a wide-angle lens. For more information, see "Lens Correction" on page 96.

#### Effect tab

- Mask & Chroma Key Allows you to apply overlay options such as mask, chroma key, and transparency.
- Replace last filter Allows the last filter applied to a clip to be replaced when you drag a new filter onto the clip. Clear this option if you want to add multiple filters to your clips.
- **Applied filters** Lists the video filters that were applied to a clip. Click **△** or **▽** to arrange the order of the filters; click **⋈** to remove a filter.
- **Presets** Provides various filter presets. Choose a preset from the drop-list.
- Customize Filter Allows you to define the behavior of the filter throughout the clip.
- Audio Filter Lets you apply a filter to enhance audio. For example, you can amplify, add an echo, adjust pitch, or choose from different leveling options.
- **Alignment Options** Allows you to adjust object position in preview window. Set the option through the **Alignment Options** pop-up menu.
- Show grid lines Select to display the grid lines. Click to open a dialog box where you can specify settings for the grid lines.
- **Direction/Style** Allows you to set the direction and style of entry/exit of the clip. This can be set to static, top/bottom, left/right, top-left/top-right, bottom-left/bottom-right. As for the style, you can set direction of entry/exit of clips through: **Rotate before/after pause duration** and **Fade in/out motion effect**.
- Advanced Motion Opens the Customize Motion dialog box which allows you to customize the motion of overlays and titles. For more information, see "Customizing motion" on page 167.

Note that audio clips in the **Voice** and **Music** tracks have different options. For more information, see "Audio" on page 113.

# Converting multiple files

Batch Convert allows you to convert a large number of files to another format in sequence. You can also create a profile for performing batch conversions. This allows you to save the batch conversion settings and apply them to future batch conversions.

#### To run a Batch Convert

- 1 Click File > Batch Convert.
- 2 Click Add and then choose the files you want to convert.
- **3** Select an output folder in **Save in folder**.
- 4 In Save as type, choose your desired output type.

  If you want to set more advanced saving options, click the Options button.
- 5 Click Convert.

The result is shown in the **Task Report** dialog box. Click **OK** to finish.

#### To create a Batch Convert profile

- 1 Click File > Batch Convert.
- 2 In the **Batch Convert** dialog box, choose the settings that you want to save as a profile.
- 3 Click the **Profile** button and choose **Add Profile**.
- 4 In the Add Template dialog box, type a name for the profile.



You can apply a Batch Convert profile by clicking the **Profile** button and choosing the profile that you want to apply.

You delete a Batch Convert profile by clicking the **Profile** button, choosing **Delete Profile**, and choosing the profile that you want to delete.

# Adding video clips

There are several ways of inserting video clips to the **Timeline**:

- Select a clip in the Library and drag it to the Video Track or Overlay Track. Multiple clips can be selected by pressing [Shift].
- Right-click a clip in the **Library** and select **Insert To: Video Track** or **Insert To: Overlay Track**.
- Select one or more video files in Windows Explorer and drag them to the Video Track or Overlay Track.
- To insert a clip from a file folder directly to the Video Track or Overlay Track, right-click the **Timeline**, select **Insert Video** and locate the video to use.



3D media clips are supported in Corel VideoStudio. You can tag 3D media clips so that they can be easily identified and edited with 3D editing features. For more information, see "Tagging files as 3D" on page 62.





Aside from video files, you can also add video from DVD formatted discs.

## Adding photos

Photo clips are added to the Video Track the same way as video clips. Before you start adding photos to your project, determine the photo size that you want for all your photos. By default, Corel VideoStudio adjusts the size to keep the photo's aspect ratio.

Corel PaintShop Pro PSPIMAGE files (\*.pspimage) are supported in Corel VideoStudio. PSPIMAGE files that are imported into the **Library** have a multiple layer indicator, so you can distinguish them from other types of media clips.



### To make all inserted photos the same size as the frame size of your project

- 1 Click Settings > Preferences > Edit.
- 2 Change the **Image resampling option** default to **Fit to project size**.

### To import PSPIMAGE files into the Timeline

- 1 Right-click a clip in the **Library**.
- 2 Click Insert To and select the track where you want to add your media clip.
- 3 Choose one of the following options:
  - Layers lets you include the layers of a file into separate tracks
  - Flatten lets you insert a flattened image into a single track



You can also drag the file directly into the **Timeline** and the program will automatically add the layers to separate tracks. To insert a flattened image, hold down **[Shift]** and drag the file.

# Moving clips in the Timeline

You can easily move clips in the **Timeline**. For example, you can move a clip to align it with clips on other tracks, to close gaps after trimming, or to overlap one clip with another to create a transition.

#### To move a clip

- 1 In the **Timeline**, do any of the following:
  - Move a clip: Click a clip, and drag it to a new position or to a new track.
  - Move a clip one frame at a time: Click a clip, and press ALT while using the right or left arrow key to move the clip.
  - Remove all gaps in a track: Right-click the track head, and in the context-menu, choose Remove all gaps.

# Rotate a video or photo

You can rotate video clips and photos to change the orientation of a video. For example, you can rotate a video that you have captured on your phone in portrait orientation to convert it to landscape orientation or you can flip an upside-down video.

#### How to rotate a video clip or photo

- 1 In the Timeline, click a video clip or photo.
- 2 In the **Options** panel, click the **Edit** tab, and click **Rotate Left** or **Rotate Right** until the orientation you want displays in the **Preview** panel.

# Crop a video or photo

You can crop a video or photo so that only the area you select appears during playback. Note that cropping is not destructive—it does not affect the original video or photo. You can change the crop area in your project file at any time.



#### How to crop a video

- 1 In the Timeline, click a video or photo.
- 2 In the Player panel, click the Resize/Crop drop-down . and choose the Crop tool .
- 3 In the preview window, do any of the following:
  - **Size**: Drag the sizing handles on the crop rectangle to set the crop area. Drag a corner handle to maintain the aspect ratio.
  - **Position**: With your pointer inside the crop rectangle, drag the crop area to a new position.

# Resizing/scaling a video or photo

You can resize/scale a video or photo interactively so that you can see a background or to create a picture-in-picture effect. You can also distort a video or photo. For example, you can creative a sense of perspective by skewing



In Scale mode, you can resize the video by dragging an orange node. Drag the green nodes to distort the image. For example, you can use distortion to create a sense of perspective.

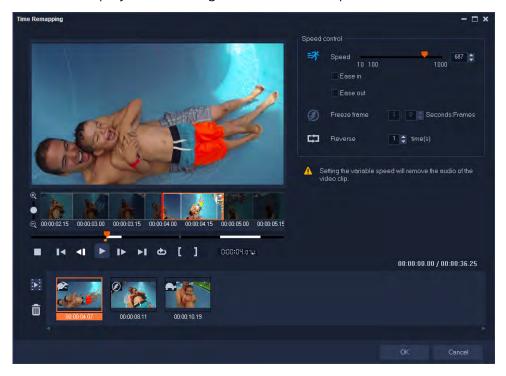
### To resize/scale a video or photo

- 1 In the Timeline, click a video or photo.
- 2 In the **Player** panel, click the **Resize/Crop** drop-down and choose the **Scale mode** tool . □.
- 3 In the preview window, do any of the following:
  - Size/Scale: Drag the orange sizing nodes on the corners of the sizing rectangle to adjust the size. To compress or stretch the video or photo, drag an orange side node.
  - **Distort:** Drag an orange side node to compress or stretch the video or photo or drag a green node to skew the video or photo.

# Time remapping

Play with speed with easy-to-use controls that let you add slow motion or high speed effects, freeze the action, or reverse and replay scenes in your video. All the tools you need for speed effects have been consolidated in one place.

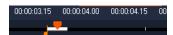
The Time Remapping dialog box includes familiar playback and trim controls, as well as a thumbnail area that displays each change made with the speed controls.



The Time Remapping dialog box

## To change the playback speed, freeze, or reverse video footage

- 1 In the Timeline view (**Edit** workspace), right-click the clip you want to work with, and choose **Time Remapping** from the context menu.
- 2 In the **Time Remapping** window, scrub through the video to figure out where you want to change the speed of playback, reverse the action, or add one or more freeze frames.
- 3 Click the Play button or drag the scrubber to the position you want, and click the Mark In button and Mark Out button to choose a segment of the clip that you want to work with. A white line indicates a marked segment of the clip.



**Note:** The playback controls let you navigate the original version of the clip (even if it is trimmed in the Timeline).

4 Do any of the following:

• Click the **Speed** button , and drag the slider to set the speed for the selected segment. Dragging to the right increases the speed; dragging to the left slows the speed.

If you want to gradually apply the speed change, you can mark the **Ease in** and **Ease out** check boxes. **Note:** The audio is removed when you change the speed of a clip.

- Click the **Reverse** button , and type a repetition value in the time(s).
- 5 To freeze a frame, click any point along the timeline that doesn't have a white line (cannot freeze a frame in a section that has been reversed or has had the speed changed), click the **Freeze Frame** button , and type the number of seconds for the frame duration.
- **6** To verify the changes you've applied, review the thumbnails that appear below the playback controls. An icon in the upper left corner of the thumbnails indicates which type of speed control has been applied (note that speed change uses different icons—a turtle to indicate slow motion; a rabbit to indicate faster speed).



Click the **Play the time remapping result** button it to play the result. If you want to remove a segment or freeze a frame, click the corresponding thumbnail, and click the **Remove selected clips** button

7 Click **OK** to return to the **Edit** workspace.

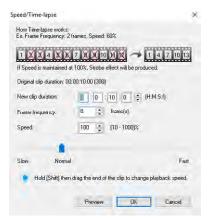
# Modifying video playback speed

You can modify the playback speed of your videos. Set your video in slow motion to emphasize a movement, or set it to play at lightning speed and give your movie a comical air. You can also use this feature to achieve time-lapse and strobe effects on your videos and photos.

You can also make quick and basic speed adjustments in the Time Remapping dialog box. For more information, see

## To adjust the speed and time-lapse attributes of your video clip

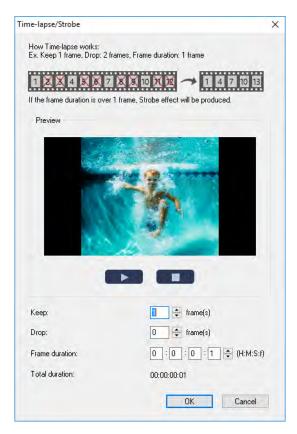
- 1 In the **Timeline**, select a video clip.
- 2 In the Options panel, click Speed/Time-lapse on the Edit tab.



- 3 In New clip duration, specify a set duration for your video clip.
  Note: If you want to maintain the original duration of your clip, do not change the original value.
- **4** In **Frame Frequency**, specify the number of frames to be removed at regular intervals during video playback.
  - **Note:** A higher value entered in Frame Frequency will produce a more noticeable timelapse effect on your video. Otherwise, maintain the value at **0** to retain all frames in your video clip.
- **5** Drag the **Speed** slider according to your preferences (i.e., slow, normal or fast), or enter a value.
  - **Note:** The higher the value you set, the faster the playback of your clip. (Values range from 10-1000%).
- **6** Click **Preview** to view the results of your settings.
- 7 Click OK.

# To apply Time-lapse/Strobe effects on your photos

- 1 Click File > Insert Media File to Timeline > Insert Photo for Time-lapse/Strobe.
- 2 Browse for the photos you want to include in your project and click Open.
  Note: It is recommended to choose a series of photos taken in succession with your DSLR.
- **3** Specify the number of frames to be retained and removed in **Keep** and **Drop**.



**Note:** For example, you enter a value of 1 in **Keep** and 3 in **Drop**. This means that it will follow the interval to retain one frame and remove three frames for the set of photos selected.

- **4** In **Frame duration**, specify the exposure time for each frame.
- **5** Use the playback controls to preview the effect of the frame settings on your photos.
- 6 Click OK.

If the value of **Frame Frequency** is more than 1 and clip duration is the same, Strobe effect will be produced. If the value of **Frame Frequency** is more than 1 and clip duration is shortened, Time-lapse effect will be produced.

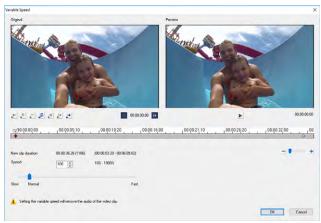
Hold [Shift] then drag the end of the clip on the **Timeline** to change the playback speed.

The black arrow means you are trimming or extending the clip, while the white arrow means that you are changing the playback speed.

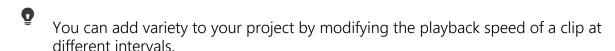
### To adjust the variable speed attributes of your video clip

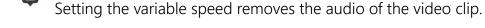
- 1 In the **Timeline**, select a video clip.
- 2 In the **Options** panel, click **Variable Speed** on the **Edit** tab.

- 3 Drag the **Scrubber** to the points where you want to add key frames.
- **4** Click **Add key frame** ★ to set the frame as a key frame in the clip. You can change the playback speed at each key frame.
- **5** To increase or decrease the speed, click the 🖹 buttons or enter a value in **Speed**. You can also drag the slider from Slow to Normal or Fast.
- **6** Click the **Play** button **▶** to preview the effect.



7 Click **OK** when finished.





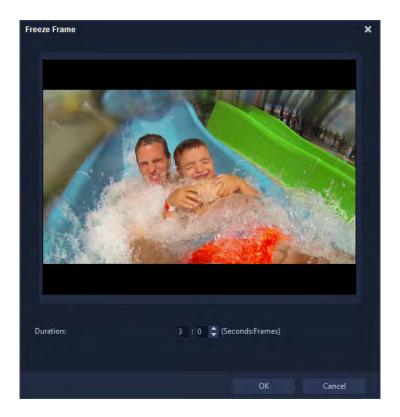
# To reverse video playback

• Click **Reverse video** in the Options Panel.

# **Using Freeze Frame**

You can use Freeze Frame to showcase a specific frame in your video by extending the length of time that frame displays. For example, you can use Freeze Frame to showcase the video frame where a goal is scored in a sporting event or use it to showcase a smile or reaction that you've captured.

When you apply Freeze Frame to a video clip, the clip is automatically split at the freeze point and the frame you choose is inserted as an image file (BMP) and displayed onscreen for the duration that you set.



#### To apply Freeze Frame

- 1 In the **Timeline**, select the video clip that has a frame you want to freeze.
- 2 Scrub to the frame you want to use. The selected frame displays in the Preview window. **Note:** The **Previous** and **Next** buttons in the Navigation panel let you navigate a clip frame-by-frame to find the frame you want.

- 3 Click Edit menu > Freeze Frame.
- 4 In the Freeze Frame dialog box, set the Duration.

**Note:** If you want to suspend audio on other tracks during the freeze, enable the **Split Audio** check box. This splits and suspends all audio-related tracks (voice, music, video overlays) for the duration of the freeze.

5 Click OK.

# Replacing media clips

Media clips in the **Timeline** can be replaced in their current position. When you replace a clip, the attributes of the original clip are applied to the new clip.

#### To replace a clip

- 1 In the **Timeline**, right-click the media clips you want to replace.
- **2** Choose **Replace clip** from the right-click menu.
  - The **Replace/relink clip** dialog box appears.
- **3** Browse for the replacement media clips and click **Open**. The clip in the **Timeline** is automatically replaced.



The duration of the replacement clip must be equal to or longer than the duration of the original clip.

Hold [Shift] and click multiple clips to select two or more clips in the Timeline and repeat the process for replacing multiple clips. The number of replacement clips must match the number of clips that you selected in the **Timeline**.



You can also drag a video clip from the Library to the Timeline and hold the **[Ctrl]** key to automatically snap on a clip to be replaced.

# Trimming a clip

The best part of editing your movie on your computer is the ease with which you can split and trim your clips with frame accuracy.

### To split a clip into two

- 1 In Storyboard View or Timeline View, select the clip you want to split.
- 2 Drag the **Scrubber** to the point where you want to split the clip.

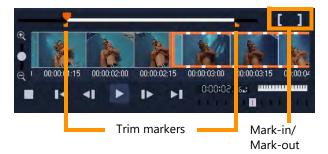


Note: Click **■** or **■** to set the cutting point more precisely.

3 Click to split the clip into two clips. To remove one of these clips, select the unwanted clip and press [Delete].

## To trim a clip with the Trim markers using Single Clip Trimmer

- 1 In the **Library**, right-click on a video clip and choose **Single Clip Trim** to launch the **Single Clip Trim** dialog box.
- 2 Click and drag the **Trim markers** to set the **Mark-in/Mark-out** points on the clip.
- 3 For more precise trimming, click on a **Trim marker**, hold it, and use the left or right arrow keys on your keyboard to trim one frame at a time. The **Mark-in/Mark-out** points can also be set by pressing **[F3]** and **[F4]**, respectively.



**4** To preview the trimmed clip only, press [Shift + Space] or hold [Shift] and click the Play button.

**Note:** You can also use zoom controls to display each frame of your video on the Timeline and trim one frame at a time. The **Scroll Bar** makes navigating through your project quicker and easier. A wheel mouse can also be used to scroll, and to zoom by pressing **[Ctrl]**.

#### To trim a clip directly on the Timeline

- 1 In the **Timeline**, select a clip.
- 2 Drag the **Trim markers** on either side of the clip to change its length. The Preview Window reflects the position of the Trim marker in the clip.



**Note:** Instant timecode tip is a feature of Corel VideoStudio that allows you to add clips with a specific timecode. It appears while trimming and inserting overlapping clips on the Timeline, enabling you to make adjustments based on the timecode shown. For example, the instant timecode tip appears with the format 00:00:17.05 (03:00 - 00). 00:00:17.05 indicates the current timecode where the selected clip is located. The (03:00 - 00) start-end range represents the duration of one overlapping clip with the previous clip and another overlapping with the next clip.



## To trim a clip using the Duration box

- 1 In the **Timeline**, select a clip.
- 2 In the Options panel, click the timecode in the Duration box on the Edit tab.
- **3** Enter the desired clip length.



**Note:** Changes made in the video **Duration** box only affect the **Mark-out** point. The **Mark-in** point remains unchanged.

## Using the Slip tool to adjust trimmed clips

The **Slip** tool lets you adjust which frames in a trimmed clip will be shown without affecting the length of the clip in the Timeline. The **Slip** tool reveals or hides *head frames* (frames trimmed from the beginning of a clip) or *tail frames* (frames trimmed from the end of a clip).



The Player panel lets you see the Mark In/Mark Out points for a trimmed clip and see if there are head frames and/or tail frames for the clip.

#### To use the Slip tool to adjust clips in the Timeline

- 1 In the **Timeline**, select a trimmed clip.
- 2 On the **Timeline** toolbar, click the **Slip** tool ...
- **3** With your pointer over the clip, drag in the **Timeline** to change which frames display in the **Timeline**.

The **Player** panel displays the clip with the trim markers to help you see how the new position affects where the **Mark In/Out** points appear.

# **Using Split by Scene**

Use the Split by Scene feature in the **Edit** workspace to detect different scenes in a video file and automatically break it down into several clip files.

The way Corel VideoStudio detects scenes depends on the type of video file. In a captured DV AVI file, scenes can be detected in two ways:

- DV Recording Time Scan detects scenes according to their shooting date and time.
- **Frame Content** detects content changes, such as motion change, camera shifting, brightness change, etc., and splits them into separate files.

In an MPEG-1 or MPEG-2 file, scenes can only be detected based on content changes (i.e., by **Frame Content**).

#### To use Split by Scene on a DV AVI or MPEG file

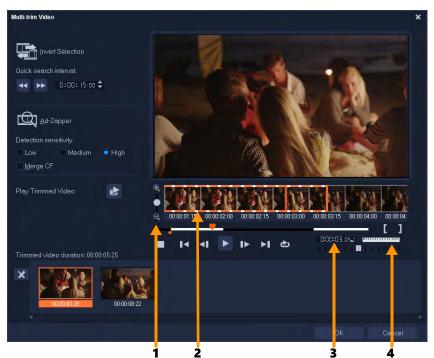
- 1 In the **Edit** workspace, select a captured DV AVI file or an MPEG file on the **Timeline**.
- 2 Click **Options** and click the **Split by Scene** button in the **Options** panel. This will open the **Scenes** dialog box.
- 3 Choose your preferred scan method (**DV Recording Time Scan** or **Frame Content**).
- 4 Click Options. In the Scene Scanning Sensitivity dialog box, drag the slider to set the Sensitivity level. A higher value means more precision in the scene detection.
- 5 Click OK.
- **6** Click **Scan**. Corel VideoStudio then scans through the video file and lists all the detected scenes.

You may merge some of the detected scenes into a single clip. Simply select all the scenes that you want to join together then click **Join**. The plus sign (+) and a number indicates how many scenes are merged into that particular clip. Click **Split** to undo any Join actions that you have done.

7 Click **OK** to split the video.

# Trimming video into multiple clips

The Multi-trim Video feature is another method for breaking down a clip into multiple segments. While Split by Scene is automatically done by the program, Multi-trim Video gives you complete control over the clips you wish to extract, making it even easier to include only the scenes you want.



Part	Description
1 — Timeline zoom	Drag up and down to sub-divide a video clip into frames per second.
2 — AccuCut Timeline	Scan a video clip frame by frame for accurate mark-in and mark-out positions.
3 — Playback Speed Control	Preview the clip at different playback speeds.
4 — Jog Wheel	Use to scroll to different parts of the clip.

#### To trim a video file into multiple clips

- 1 In the Timeline of the **Edit** workspace, select the clip that you want to trim.
- 2 Double click the clip to open the **Options** panel.
- 3 Click Multi-Trim Video.
- 4 View the whole clip first by clicking **Play** to determine how you want to mark segments in the **Multi-Trim Video** dialog box.
- **5** Choose the number of frames to display by dragging the Timeline zoom. You can choose to display the smallest subdivision of one frame per second.
- 6 Drag the **Scrubber** until you get to the part of the video that you want to use as the beginning frame of the first segment. Click **Set Mark-in** button .
- 7 Drag the **Scrubber** again, this time, to the point where you want the segment to end. Click **Set Mark-out** button .
- **8** Do steps 4 and 5 repeatedly until you have marked all the segments you want keep or remove.

**Note:** To mark segments in and out, you can press **[F3]** and **[F4]** while playing the video. You can also click the **Invert Selection** button or press **[Alt+I]** to toggle between marking segments that you want to retain or marking segments that you want taken out from the clip.

**Quick search interval** allows you to set a fixed interval between frames and browse through the movie using the set value.

9 Click **OK** when finished. The video segments that you kept are then inserted onto the **Timeline**.

#### Navigation controls in the Multi-trim Video dialog box

<b>∓</b>	Reverses or advances through the video in fixed increments. By default, these buttons move up or down through the video in increments of 15 seconds.
<b>i</b> Ŀ	Plays a preview of the final trimmed video.
<b>&gt;</b>	Plays the video file. Hold [Shift] then click to play only the selected segments.

<b>I</b> ✓	Moves to the start or end frame of a trimmed segment.
<b>▼</b> I   <b>&gt;</b>	Moves to the previous/next frame in the video.
t1	Repeats playback of video

# Saving trimmed clips

Frequently, when you make changes (i.e., after auto-splitting clips using Split by Scene, extracting clips using Multi-trim Video, or manually trimming clips), you may wish to make a permanent change to the clip and save the edited file. Corel VideoStudio gives you a margin of safety since it saves the trimmed video to a new file and does not alter the original file.

### To save a trimmed clip

- 1 In the Storyboard View, Timeline View, or the Library, select a trimmed clip.
- 2 Click File > Save Trimmed Video.

# Taking a snapshot from a video clip

You can take a photo snapshot in the **Edit** workspace by selecting a specific frame on the **Timeline** and saving it as an image file.

### To capture photos in the Edit workspace

- 1 Click Settings > Preferences > Capture.
  - Choose **Bitmap** or **JPEG** as the **Snapshot format**.
  - Note: If you select JPEG, set the Snapshot quality.
- 2 Click OK.
- 3 In the **Timeline**, select a video clip in your project.
- **4** Drag the **Scrubber** to the frame you want to capture.
- 5 Click **Edit** > **Take a Snapshot**. The photo snapshot is automatically added to the **Library** and saved to your working folder.

# Adjusting the color and tone of clips

Corel VideoStudio lets you improve the appearance of a video or image clip by adjusting its current properties.

### To adjust color and brightness

- 1 In the **Timeline** of the **Edit** workspace, select a video or image clip.
- 2 In the **Options** panel, click the **Color** tab, and drag the sliders to adjust the **Hue**, **Saturation**, **Brightness**, **Contrast** or **Gamma** of the clip.
- Watch the Preview to see how the new settings affect the image.Note: Double-click the appropriate slider to reset the original color setting of the clip.

### To adjust the tone quality of your video or image clips

- 1 In the **Timeline** of the **Edit** workspace, select a video or image clip.
- 2 In the Options panel, click the Color tab, and click Auto Tone Adjustment.
  Note: You can indicate if you want the clip as Brightest, Brighter, Normal, Darker or Darkest by clicking the Auto Tone Adjustment drop-list.

## Adjusting white balance

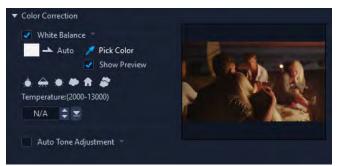
White balance restores the natural color temperature of an image by removing unwanted color casts due to conflicting light sources and incorrect camera settings.

For example, an object illuminated with incandescent lights may turn out too reddish or yellowish in an image or video clip. To successfully achieve a natural look, you need to identify a reference point in your image which represents the color white. Corel VideoStudio gives you different options in selecting the white point:

- **Auto** Automatically chooses a white point that is well-matched with the overall color of your image.
- **Pick Color** Allows you to manually select the white point in the image. Use the Eyedropper Tool to pick a reference area that should be white or neutral gray.
- White balance presets Automatically selects the white point by matching specific light conditions or scenarios.
- **Temperature** Allows you to specify color temperature of light sources in Kelvin (K). Lower values indicate Tungsten, Fluorescent and Daylight scenarios while Cloudy, Shade and Overcast fall under high color temperature.

### To adjust White balance

- 1 In the **Timeline** or **Library** of the **Edit** workspace, select a video or image clip.
- 2 In the **Options** panel, click the **Color** tab.
- **3** Check the **White Balance** option box.
- 4 Determine how you want to identify the white point. Choose among the different options (Auto, Pick Color, White Balance presets (lighting icons) or Temperature).



- 5 If you have selected **Pick color**, choose **Show preview** to display a preview area in the Options Panel.
- **6** When you drag your cursor to the Preview area, it will change to an eyedropper icon.
- 7 Click to identify a reference point in your image which represents the color white.
- **8** Watch the Preview Window to see how the new settings affect the image.

# Color grading with lookup tables (LUT profiles)

You can color grade your video clips by applying a lookup table file, also known as a LUT profile. LUT profiles are typically used to recreate a specific film look that affects the overall mood of the clip. The LUT profiles contain color values that combine with the color values of your clip to create a new result.

**Note:** If you need to correct the color in your video clip, it's best to do this before you apply a LUT profile, especially if you have several video clips that will have the same coloring.



LUT profiles let you recreate a specific film or creative look.

### To apply a LUT profile to a video clip

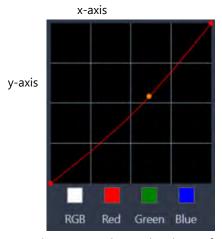
- 1 In the **Timeline**, select the video clip that you want to color grade.
- 2 In the **Options** panel, click the **Color** tab.
- 3 Click the **Basic** button, and in the **Color Correction** section, choose a LUT file from the **LUT Profile** drop-down menu.
  - If the profile you want to apply is not listed, click the **Browse** button and choose the file you want (.cube file format).
- **4** To fine-tune the look, use the controls in the **Color Correction** section. An icon appears in the upper-left corner of video clips that have a LUT file applied.

#### To remove a LUT profile from a video clip

- 1 In the **Timeline**, select the video clip.
- 2 In the **Options** panel, click the **Color** tab.
- 3 Click the **Basic** button, and below the **Color Correction** section, choose **None** from the **LUT Profile** drop-down menu.

# **Tone Curve**

The Tone Curve lets you perform color and tonal corrections by adjusting either individual color channels or the composite (RGB) channel.



The x-axis of the graph represents the original tonal values (from highlights on the right, to shadows on the left); the y-axis of the graph represents the adjusted tonal values (from dark/less color at the bottom, to light/more color at the top).

The diagonal line on the graph is what you adjust to create your "curve". Moving the curve up and to the left lightens the clip and increases the color in any channel; moving the curve down and to the right darkens the clip or decreases the color of a given channel. If you have a clip with a blue cast, for example, you can decrease the blue in the image by selecting the Blue channel and moving the curve down and to the right.

You can add one or more nodes to the curve, to give you more precise control over the areas that you want to adjust.

# To adjust color and tone with Tone Curve

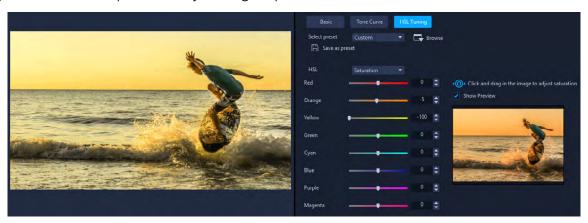
- 1 In the **Timeline**, select the video clip that you want to color correct.
- 2 In the **Options** panel, click the **Color** tab.
- 3 Click the **Tone Curve** button.
- **4** Below the curve graph, select one of the following color channel options:
  - RGB lets you edit the red, green, and blue channels in a combined histogram

- Red lets you edit the red channel only
- Green lets you edit the green channel only
- Blue lets you edit the blue channel only
- 5 Drag points on the graph to adjust the relationship between the **Input** levels (the brightness of the original pixels) and the **Output** levels (the brightness of the corrected pixels).
- **6** If you want to add a point to the curve, click along the line where you want to add the point.

Note: At any point you can reset the curve by clicking Reset All.

# **HSL Tuning**

HSL (Hue, Saturation, Lightness) is a powerful color adjustment tool that lets you interactively adjust colors in a clip. This lets you target specific colors.



An interactive control can be dragged across a clip in the Player panel or in the preview area in the Options panel to adjust hue, saturation, or lightness of the underlying sample area.

## To adjust color with HSL Tuning

- 1 In the **Timeline**, select the video clip that you want to color correct.
- 2 In the **Options** panel, click the **Color** tab.
- 3 Click the **HSL Tuning** button.
- 4 Click one of the following tabs:
  - Hue
  - Saturation
  - Lightness
- **5** Do one of the following:

the corresponding sliders to the left; dragging to the right, moves the corresponding sliders to the right.

• Adjust the individual sliders to set the values you want.

**Note:** You can apply a preset by choosing an option from the **Select preset** drop-list. You can also save your custom settings as a preset by clicking **Save as preset**. To clear all changes, choose **Default** from the drop-list.

#### **Lens Correction**

Wide-angle lenses, often used in video action cameras, are great for capturing a wide scene, but they cause distortion in the video footage. **Lens Correction** has presets (for some GoPro cameras, for example) and manual controls that let you reduce distortion.



Distortion (left) can be reduced (right) by using Lens Correction.

# To correct wide-angle lens distortion

- 1 In the Timeline, double-click a clip with lens distortion, and in the **Options** panel, click **Lens**.
- 2 In the **Select preset** drop-list at the top, choose a preset.

The preview of the correction applies to the entire clip.

Advanced users can manually adjust the settings to correct distortion.

**Note:** To reset the clip to the original settings, choose **Default** from the **Select preset** drop-list.

# Pan and zoom for video and photos

You can apply a pan and zoom effect to your photos and video clips. For example, you can choose to start playing a video clip with a the full frame in view, and gradually zoom in to show a specific subject in the video, then pan to show other subjects in the video. Conversely, you can start with a close-up of a subject in your video, and gradually zoom out to show the full scene. You can also create a static zoom that does not change as the video plays. For example, a static zoom can be applied to draw attention to the main action in a video that was originally set to capture a wide area, for example, a scene captured with a tripod.

Pan and Zoom is a great tool to use with 4K video because you can pan and zoom across your 4K video source and still get an HD result.



Whether it's a quick pan and zoom effect, or a customized result that requires key frame precision, the Pan and Zoom window provides you with the tools you need.

There are three editing modes for **Pan and Zoom**:

- **Static**: Maintains the zoom level that you set throughout the video.
- Animated: Lets you use crosshairs to adjust pan and zoom key frames precisely.
- On the Fly: Lets you adjust pan and zoom settings interactively while the video plays.

### Pan and Zoom: Settings and controls

The following settings and controls are available in the **Pan and Zoom** window. The availability of controls depends on what is currently selected and the **Edit Mode** you choose. For information about common key frame, playback, and preview controls, see "Customizing filters" on page 149.

- Edit Mode: Choose between the Static, Animated or On the Fly editing modes.
- **Preset Size**: Choose a preset for HD, 2K, 4K, and more.
- Stay within source boundary: Ensures that the boundary of the project is used as the boundary for the pan and zoom effect (the effect will not extend beyond project edge).
- **Position**: A one-click way to position the marquee in one of nine common alignment options.

- Ease in: Starts slower and gradually brings the pan and zoom effect up to full video speed.
- **Grid lines**: Displays a grid that helps you align the marquee.
- **Grid size**: Specifies grid line spacing according to the number of divisions you set.
- Snap to grid: Aligns marquee to closest grid line automatically.
- **Background color**: Specifies the color of the background if marquee extends beyond the boundary of the media.
- **Vertical**: Specifies the y-axis position (top to bottom).
- **Horizontal**: Specifies the x-axis position (left to right).
- **Rotation**: Specifies the angle of the marquee in degrees.
- **Zoom ratio**: Specifies the zoom level by adjusting the size of the marquee.
- **Transparency**: Specifies the opacity of the photo or video at the selected key frame.

#### To set a constant zoom level for a photo or video

- 1 In the **Timeline**, select a photo or video clip and click the **Pan and Zoom** button on the Timeline toolbar.
  - The **Pan and Zoom** window opens.
- 2 In the **Edit Mode** drop-down, choose **Static**.
- 3 In the **Preset Size** drop-down, choose a preset (such as HD if you're zooming in on a 4K video), or in the **Original** pane of the preview window, use the marquee to set the zoom area and position.

# To apply a pan and zoom effect to a video while it plays

- 1 In the **Timeline**, select a video clip and click the **Pan and Zoom** button on the Timeline toolbar.
  - The **Pan and Zoom** window opens.
- 2 In the Edit Mode drop-down, choose On the Fly.
- 3 In the **Original** pane (on the upper left side of the window), adjust the starting size and position of the marquee. The result displays in the **Preview** pane on the right.
- 4 Click the Play button.
- **5** As the video plays, reposition and resize the marquee as you want. Key frames are added automatically for each change you make.
- **6** Fine tune the results by using the key frames and adjusting the settings.
- 7 Click **OK** to return to the **Edit** workspace.

## To apply a pan and zoom effect by using key frames

- 1 In the **Timeline**, select a video clip and click the **Pan and Zoom** button on the Timeline toolbar.
  - The **Pan and Zoom** window opens.
- 2 In the Edit Mode drop-down, choose Animated.
- **3** Ensure that the Start key frame (first key frame) is selected in the effect timeline (appears as a red diamond).
  - If the Start key frame is not selected, click it.
- 4 In the **Original** pane, click to set the position of the marquee.

  A red crosshair displays to represent the currently selected key frame. Use the controls to set the **Zoom ratio** and any other settings you want.
- **5** In the effect timeline, click the End key frame (last key frame), and repeat step 4.
- **6** Click the **Play** button **t** to preview the effect.
- 7 Double-click the timeline to add any additional key frames, and repeat step 4.
- 8 Click **OK** to apply effect and return to the main workspace.

# Working with the Mask Creator (Ultimate)

You can create and edit masks in VideoStudio Ultimate that let you apply an effect to selected areas. The **Mask Creator** helps you apply a mask by using a brush, shape tools, or a text tool. You can also invert a mask to swap the selected and unselected areas.

Edit media 99



In the Mask Creator, a highlight and a blue bounding box indicate the mask area.

You can choose from two mask types: **Video** and **Still**. A **Video** mask is designed to move and change according to the movement in the video as it plays. A **Still** mask remains static (does not change) as the video plays and it can be applied to an image.

Video masks use **Detect movement** options to help match the mask to the movement of the selected object or background. Note that the **Edge tolerance** settings affect the edge detection of the mask as it plays. You can choose to detect the movement from frame-to-frame, from the current position to end of video, and from the current position to a specified timecode.



A video mask and a special effect (Colored Pen) creates a unique scene.



A text mask can be used with video or images.

Editing options, such as copy, paste, and move, let you customize and fine-tune a video mask.

You can save your mask so that you can use it with other projects. When you exit the **Mask Creator**, the mask appears as a mask clip on a track below the corresponding source clip.



Masks appear in a track below their corresponding clip and can be identified by a mask icon and an elliptical vignette thumbnail.

Saved masks can be imported to the list of overlay options. For more information about using mask frames and video masks with overlays, see "Adding a mask frame" on page 157 and "Using video masks with overlay clips" on page 157.

### Mask Creator tools and options

You can use the following **Masking tools**:

- Mask Brush Lets you draw a freehand mask. Can be adjusted with the Brush size slider.
- Smart Mask Brush Lets you draw a freehand mask that uses edge-detection to make it easier to select distinct objects. Can be adjusted with the Brush size and Edge tolerance sliders.
- Rectangle tool Lets you apply a rectangular mask. For video masks, edgedetection adjusts the edges for subsequent frames.
- Ellipse tool Lets you apply an elliptical mask. For video masks, edge-detection adjusts the edges for subsequent frames.
- Eraser Lets you erase the mask. Can be adjusted with the Brush size slider.

Edit media 101

- Smart Eraser Lets you erase the mask using edge-detection to make it easier to select distinct objects. Can be adjusted with the Brush size and Edge tolerance sliders. In addition to the Brush size slider, you can use the Edge tolerance slider.
- Freehand tool Lets you draw an outline around the area you want to mask (start and end points must meet).
- **Text Mask** Lets you create a text mask. When active, standard text options display (font, size, alignment, and formatting options).
- Clear Mask 🐼 Removes the mask completely.
- Brush size slider Changes the diameter of the Mask Brush, Smart Mask Brush,
   Eraser, and Smart Eraser.
- Edge tolerance slider Determines the sensitivity for mask edge detection based on how closely the pixels that you select with the masking tools match the adjacent pixels. At low settings, only similar pixels are included in the mask; at high settings, the mask expands to include a wider range of pixels.

You can manage and edit masks with the following Editing tools:

- Show/Hide Mask Hides or shows the mask highlight and bounding box in the playback area.
- Copy Lets you copy a mask from a specific frame
- Paste 📑 Lets you paste a mask that you copied from another frame
- Move Mask 🚳 Lets you move the mask to a new position in the frame
- Undo 🕽 Removes the last edit
- Redo . Reapplies the last edit if Undo was used

Video masks can use the following **Detect movement** options:

- **Next Frame** — Detects movement and adjusts mask from the current scrubber position to the next frame
- End of Clip Detects movement and helps to adjust a mask for all frames from the current scrubber position until the end of the clip. Note: This can take a few minutes, depending on the length and quality of the clip.
- Specified Timecode —— Detects movement and helps to adjust the mask for all frames from the current scrubber position until the specified timecode. Note: This can take a few minutes, depending on the length and quality of the clip.

**Note:** Creating precise video masks requires fine-tuning between frames.

### To create a still mask or text mask with the Mask Creator

- 1 In the Timeline view (**Edit** workspace), select the clip you want to work with, and click the **Mask Creator** button on the **Timeline** toolbar.
- 2 In the Mask Creator window, click the Still option.

- 3 In the tools area, choose one of the following: Mask Brush, Smart Mask Brush, Rectangle tool, Ellipse tool, Freehand tool or Text Mask.
- **4** In the playback window, drag, draw, or type to select a mask area. A highlight appears over the selected area.
- You can fine-tune the mask by using the tools to modify the selected area.
  To reset the mask, click the Clear Mask button.
  If you want to invert the mask, in the Save options area, click the Invert mask option.
  If you want to save the mask as a Mask Frame (Options panel, Effect > Apply Overlay Options > Mask Frame), click Save As and type a name for your PNG mask.
- 6 Click **OK** to exit **Mask Creator**.

The mask appears on its own track in the **Timeline**, below the original source clip. You can adjust the length of the mask as you would other clips and you can apply effects to the mask by dragging an effect onto the mask in the **Timeline**. You can also change the clip for the mask by dragging a new clip from the **Library** to the masked clip and pressing **CTRL**.

#### To create a video mask with the Mask Creator

- 1 In the **Timeline** view (**Edit** workspace), select the clip you want to work with, and click the **Mask Creator** button on the **Timeline** toolbar.
- 2 In the **Mask Creator** window, click the **Video** option.

  If you are creating a video mask for a specific segment of the video clip, scrub through the video to figure out when you want the masking to start and stop. Make note of the timecode for the stop time.
- **3** In the tools area, choose a masking tool.
- 4 In the playback window, drag across the area that you want to select. A highlight appears over the selected area.
- 5 In the **Detect movement** area, choose **Next Frame** , **End of Clip** , or type a timecode in the timecode box and then click **Specified Timecode** . Note that when you detect movement to the end of a clip or to a specified timecode, it can take a few minutes, depending on the length of the clip and the quality.
- 6 Review the results in the playback window. You can fine-tune by scrubbing through the video and using the **Eraser** tool and **Brush** tool to modify the selected area. In some cases, you might find the **Editing tools** helpful when working from frame-to-frame. If you want to invert the mask, in the **Save options** area, click the **Invert mask** option.
- 7 Click **OK** to exit **Mask Creator**.

Edit media 103

#### To edit a mask

1 In the **Timeline** view (**Edit** workspace), select a clip that has a mask, and click the **Mask Creator** button on the **Timeline** toolbar.

The **Mask Creator** dialog box opens. Make any adjustments you want and click **OK** to return to the **Timeline**.

#### To save a mask

1 After you create a mask, in the **Save options** area of the **Mask Creator** dialog box, click **Mask** (default) or **Invert mask**.

**Note:** If you invert the mask, the preview area does not show the inverted mask—it displays when you return to the Timeline.

- 2 Set a destination in the Save to box.
- **3** Click the **Save As** button at the bottom of the dialog box, and choose a name for the mask.

If you want to link the mask to the original clip, mark the **Link mask to source clip** check box. Note that you can link only one mask per file.

### To import a video or still mask as an overlay option

- 1 In the **Timeline**, select an overlay clip.
- 2 In the Options panel, click Effect tab.
- 3 Enable the **Apply Overlay Options** check box, then choose **Mask Frame** (for a still mask) or **Video Mask** from the **Type** drop-list.
- 4 Click the **Add mask item(s)** button to the right of the mask preview area, and browse to a saved mask file (.uisx format for a video mask, .png for a still mask).

  The mask is added to the preview area.



You can remove files from the video masks list by clicking the thumbnail for the mask, and clicking the **Remove mask item** button **=**.

You can create a folder for masks in the default user content folder: ...Documents/Corel VideoStudio Pro/22.0/.

## Track transparency

You can use the **Track Transparency** mode to precisely control the transparency of a track. Key frames let you vary track transparency to achieve the effect you want. For example, you can adjust the transparency of a track to create a superimposed effect (where the underlying track shows through) or to create a custom fade in and fade out effect.



### To adjust track transparency

- 1 In the **Edit** workspace, choose a track in the Timeline that you want to adjust.
- 2 In the track header, click the **Track Transparency** button **\*\***. **Track Transparency** mode opens.



- **3** Do any of the following
  - To adjust the transparency for the entire track, drag the yellow line to a new vertical position. The top has a value of 100% opacity and ranges to 0% opacity (fully transparent) at the bottom.
  - To vary the transparency throughout the track, click the yellow line to set a key frame. You can add as many key frames as you like. Drag the square key frame node to the transparency level you want.
  - To delete a key frame, right-click a key frame node and choose **Remove key frame**.
  - To delete all key frames, right-click a key frame node and choose **Remove all key frames**
- **4** To exit **Track Transparency** mode, click the **Close** button **⋈** in the upper-right corner of the Timeline.

Edit media 105



360 video is an interactive type of video that lets the viewer look in any direction by changing the viewing angle during playback. The viewing angle can be controlled by using a touchscreen, onscreen controls, or by moving the viewing device, such as a smartphone or tablet, in different directions. 360 video requires a special 360 video player (for example, YouTube and Facebook have 360 video players). 360 video footage can also be converted to standard video, offering many creative options along the way.

In this section, you'll learn about:

- Editing 360 video
- Converting 360 video to standard video
- Tiny planet and rabbit hole effects from 360 video

# Editing 360 video

VideoStudio lets you edit different types of 360 video footage (check the instructions for your 360 video camera for more information). For example, you can adjust the color or brightness of the video, trim the video, or add titles or objects. Please note that not all effects can be applied to 360 videos.



**Note:** There are different types of 360 video. VideoStudio supports the following types of 360 video:

- Monoscopic Equirectangular
- · Single Fisheye
- Dual Fisheye

360 video 107

You can convert any supported 360 video to Standard, or convert Single Fisheye or Dual Fisheye to Equirectangular video.

### To edit and export a 360 video

- 1 In the **Edit** workspace, drag a 360 video from the **Library** to the **Timeline**. If you want to convert a fisheye or dual fisheye video to equirectangular, right-click the clip in the **Timeline**, choose **360 Video** > **360 Video Conversion**, and choose the corresponding option. If you want to adjust any conversion settings, adjust the controls and click **OK**.
- 2 In the **Timeline**, verify that you are working with a 360 video by ensuring that the 360 video icon displays in the **Player** panel.
- **3** Edit the video in VideoStudio. For example, you can do the following:
  - Open the **Options** panel to access **Color** settings
  - Apply an effect from the **Library** (\*Not all effects can be applied to 360 video.)
  - Trim the video
  - Add a title or object

**Note:** When you apply a title or object to a 360 video, right-click the item in the **Timeline**, and choose **360 Video** > **Insert as 360** to convert the media to 360. Make any adjustments you want in the **Insert as 360** window. A circular 360 icon appears on titles and other objects inserted as 360.



- 4 When you are finished editing, save your file and click the **Share** tab.
- **5** From the **Share** tab, ensure that you enable the **Same as Project Settings** check box or select a 360-compatible setting (for example, MPEG-4, AVC 360, in the highest resolution suitable for your project).
- 6 Make any additional changes to the settings on the **Sharing** page and click **Start**.

# Converting 360 video to standard video

Here are a few reasons people choose to convert 360 video:

- There are occasions when you want to control what users look at in 360 video footage.
   When you convert to standard video in VideoStudio, you can use your 360 video source in much the same way that you can use multicamera sources—you can choose the view for your audience with key frame precision.
- You can play standard video using a wider range of applications and devices—no special player is required (the video is not interactive).
- Standard video is a much smaller file size than 360 video.



The 360 to Standard dialog box. The 360 video source displays on the left and a standard video preview displays on the right

### Controls and settings

The following controls and settings can be found in the **360 to Standard** and **Insert as 360** windows.

- The playback bar let you navigate your clip (Home, Previous Frame, Play, Next Frame, End)
- **Timecode** \*\*B: \*\*B: \*\* lets you jump directly to a part of your selected clip by specifying the exact timecode.
- **Scrubber** let you scrub through the clip. Clicking a key frame will move the scrubber to the current position in the timeline.
- The **timeline** in the **360 to Standard** dialog box is a simple bar with time indicators. It contains any key frames you set and can be navigated with the scrubber. You can use the **Zoom in** and **Zoom out** buttons to the right of the timeline to expand or condense the units of time.
- Pan Lets you adjust the view horizontally (x-axis)
- **Tilt** Lets you adjust the view vertically (y-axis)
- **Field of View** Lets you adjust the how close or how far away the camera appears to be from the scene in the selected view—the effect is similar to zooming. Lower values zoom in for a narrower view; higher values zoom out for a wider view.

360 video 109

#### To convert 360 video to standard video

- 1 In the **Timeline**, right-click a 360 video clip, and choose **360 Video** > **360 to Standard**. The **360 Video** window opens with two preview panes—the 360 video source is on the left and a standard video preview is on the right.
- 2 In the 360 video pane, drag the **View Tracker** icon the view that you want to show in the standard video pane.
- **3** Click **Play** and as the 360 video plays, drag the **View Tracker** if you want to change the view seen in the standard video pane.
  - Each time you change the view, key frames are added.



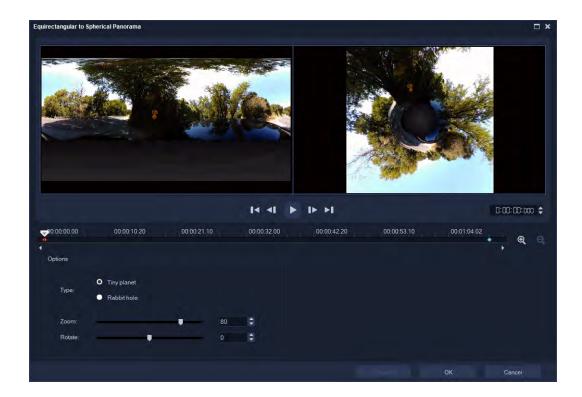
Key frames appear as blue diamonds along the timeline. The selected key frame is red. Key frame buttons (standard key frame controls) appear above the timeline.

- **4** When you are finished, you can replay the video and edit the view by doing any of the following:
  - Delete a key frame by clicking it on the **Timeline** and pressing **Delete**.
  - Drag a key frame on the timeline to change when the view appears.
  - Click a key frame and change the view by adjusting the **Pan**, **Tilt**, and **Field of View** values in the **Angle** area.
- 5 Click **OK** to accept the changes and return to the **Timeline**. If you want to clear all key frames, click the **Reset** button.
- 6 When you want to output your project, ensure that you choose a standard video format.

# Tiny planet and rabbit hole effects from 360 video

You can create tiny planet videos and rabbit hole videos from your 360 video footage (equirectangular or dual fisheye).

When you apply the effect, the video is converted to a standard format, with a square aspect ratio.



## To apply a tiny planet or rabbit hole effect to a 360 video

- 1 In the **Timeline**, right-click a 360 video that is in the equirectangular format or dual fisheye, and from the context menu choose **360 Video** > **360 Video Conversion** > **Equirectangular to Spherical Panorama** or **Dual Fisheye to Spherical Panorama**.
- 2 In the **Options** area of the editing window, choose one of the following:
  - **Tiny Planet**: Creates a sphere using the bottom edge of the video as the center, depending on the video content, this often creates a planet-like effect.
  - **Rabbit Hole**: Creates a sphere using the top edge of the video as the center, depending on the content of the video, this often creates a tunnel effect.
- **3** Use the built-in timeline and scrubber to review the video, adjusting the following controls at any point (keyframes are added each time you change the settings):
  - **Zoom**: Changes the field of view to zoom in or zoom out of the scene.
  - Rotate: Sets the rotation for the video in degrees (-360 to 360).

**Note:** To delete a keyframe, select it (changes to red), and press **Delete**. To delete all keyframes, right-click any keyframe and from the context-menu, choose **Delete All**.

360 video 111



Sound is one of the elements that determine the success of your video production. Corel VideoStudio allows you to add music, narration, and sound effects to your project.

The Audio feature in Corel VideoStudio consists of four tracks. You can insert narrations on the **Voice Track** and the background music or sound effects on the **Music Track**.

This section contains the following topics:

- Adding audio files
- Using Audio Ducking to automatically adjust volume
- Splitting an audio track from a video clip
- Using Auto Music
- Balancing the volume of multiple clips with Normalize Audio
- Adjusting clip volume
- Trimming and cutting audio clips
- Stretching audio duration
- Applying fade-in/out
- Using the Sound Mixer
- Adjusting stereo channels
- Using the Surround Sound Mixer
- Mixing Surround Sound
- Duplicating an audio channel
- Applying audio filters

# Adding audio files

You can add audio files to your project in any of the following ways:

- Add audio files to the **Library** from a local or network drive. (Triple Scoop royalty-free music is included in the Library).
- Rip audio from CD
- Record a voice-over clip
- Use Auto Music

**Note:** You can also extract audio from a video file.

Audio 113

### To add an audio file to the Library

• Click the **Import Media Files** button to browse for audio files in your computer.

After you import audio files to the Library, you can add them to your project by dragging them from the Library to the Timeline.

#### To add voice-over narration

- 1 Move the **Scrubber** to the section of the video where you want to insert your voice-over.
- 2 In **Timeline** view, click the Record/Capture Option button and select **Voice-over**. The **Adjust Volume** dialog box appears.
  - **Note:** The program prompts you when there is an existing voice-over clip at the current project cue position. Make sure that a clip is not selected by clicking on an empty area in the **Timeline**.
- 3 Speak into the microphone and check if the meter responds accordingly. You can use the **Windows audio mixer** to adjust the level of the microphone.
- 4 Click Start and begin speaking into the microphone.
- **5** Press [Esc] or [Space] to end recording.
- **6** The best way to record narrations is to do the recording in 10 to 15-second sessions. This makes it easier to remove a badly recorded narration and redo it. To remove, just select the clip on the **Timeline** and press **[Delete]**.

## To import music from an audio CD

- 1 In **Timeline** view, click the Record/Capture Option button and click Import from audio CD.
  - The **Rip CD Audio** dialog box appears.
- **2** Select the tracks to be imported in the **Track List**.
- 3 Click **Browse** and select the destination folder where the imported files will be saved.
- 4 Click **Rip** to start importing the audio tracks.

# Using Audio Ducking to automatically adjust volume

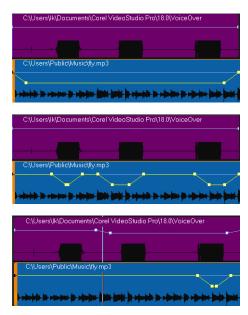
Audio ducking (similar concept to side-chaining) is used to automatically lower the volume of one track so that you can hear another track better. For example, if you have a video project that includes music and voiceover, you can use audio ducking to automatically decrease the music volume when the narrator is speaking. You can adjust the threshold that triggers "ducking" and you can adjust by how much the volume of the background track will drop.

### To use Audio Ducking

1 In the Timeline view (Edit workspace), ensure that the track you want to apply "ducking" to is below the video, overlay, or voice track that you want to feature.



- 2 Right-click the music track that you want to "duck" and choose **Audio Ducking**.
- 3 In the **Audio Ducking** dialog box, adjust the following sliders:
  - **Ducking Level** determines the volume decrease. Higher numbers indicate lower volume.
  - **Sensitivity** determines the volume threshold (read from the track above the selected track) required for ducking to occur. You will likely need to readjust the **Sensitivity** slider to achieve the results you want.
  - Attack determines the time it takes to lower the volume to the **Ducking Level** setting after the **Sensitivity** threshold is met.
  - **Decay** determines the time it takes to return to the regular clip volume from the **Ducking Level**



In these examples, the voiceover is the purple track and the music is the blue track. The yellow line in each example indicates when and by how much the volume of the music track is lowered by applying different Sensitivity settings for Audio Ducking: Top = 0, Top = 0,

•

You can tweak Audio Ducking results manually by dragging, adding, or removing key frame nodes on the yellow volume line.

Audio 115

# Splitting an audio track from a video clip

Corel VideoStudio lets you split the audio portion from an existing video clip into an audio track.



Video clips that contain audio display an Audio icon

### To split an audio track from a video clip

- **1** Select the video clip.
- 2 Right-click the video clip and select **Split Audio**.
  - This generates a new audio track.

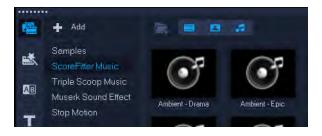


Once you split an audio track from a video clip, you can apply an audio filter to the audio track. For more information, see "Applying audio filters" on page 121.

## **Using Auto Music**

The **Auto Music** feature of Corel VideoStudio lets you easily create high-quality sound tracks from the ScoreFitter library of royalty-free music. Songs have different variations to help you set the right feel for your video production.

You can also access ScoreFitter music in the Library by clicking the **Scorefitter Music** folder.



#### To add music with Auto Music

- 1 Click the **Auto Music** button in the **Toolbar**. The **Auto Music** panel opens.
- 1 In the **Category** list, select the type of music you want.
- 2 In the **Song** list, select a song.
- 3 In the **Version** list, select the version of the song.

To listen to your selection, click the Play Selected Song button

## Balancing the volume of multiple clips with Normalize Audio

**Normalize Audio** automatically balances the volume level for a group of selected audio and video clips. Whether the audio is are barely audible, or loud and clear, **Normalize Audio** ensures a consistent volume range across all the clips. The volume levels of the selected clips are analyzed and the volume level of the clips with lower volumes is raised to be consistent with the clip that has the highest volume level. For information about adjusting clip volume manually, see "Adjusting clip volume" on page 117.

## To apply Normalize Audio to multiple clips with audio

- 1 In the **Edit** workspace, select the audio clips that you want to balance. To select multiple clips, hold **Shift** and click the clips.
- 2 Right-click a selected clip and choose Normalize Audio.

# Adjusting clip volume

There are different ways to control clip volume. Clip volume represents the percentage of the original recorded volume. Values range from **0** to **500**%, where **0**% completely silences the clip and **100**% retains the original recorded volume.

### To adjust the volume of a video or audio clip

- 1 In the **Timeline**, select an audio clip (or video with sound).
- 2 Do one of the following:
  - Right-click the clip, choose **Adjust Volume** from the context menu, and enter a new value in the volume box.
  - Click the **Sound Mixer** button on the Timeline toolbar, and in the **Options** panel, adjust the volume slider.

# Trimming and cutting audio clips

After recording voice and music, you can easily trim your audio clips in the **Timeline**.

Audio 117

### To trim audio clips

- Do one of the following:
  - Drag a handle, either from the beginning or end, to shorten a clip.

**Note:** In the **Timeline**, a selected audio clip has two handles that can be used for trimming.



• Drag the Trim markers.



• Move the **Scrubber** and click the **Mark-in** / **Mark-out** buttons.



### To split the audio clip

• Click the **Split Clip** button **X** to split the clip.



# Stretching audio duration

The time stretch feature allows you to stretch an audio clip to match video duration without distorting its pitch. Normally, stretching audio clips to fit the project results in a distorted sound. The time stretch feature will make the audio clip sound like it is just played in a slower tempo.



When you stretch an audio clip by 50-150%, the sound will not be distorted however, if stretched below or above that range the sound may be distorted.

## To stretch the duration of an audio clip

- 1 Click on an audio clip in the **Timeline** or **Library** and open the **Options Panel**.
- 2 In the Music & Voice tab panel, click Speed/Time-lapse to open the Speed/Time-lapse dialog box.
- **3** Enter a value in **Speed** or drag the slider to change the speed of the audio clip. A slower speed makes the clip's duration longer while a faster speed makes it shorter.
  - **Note:** You can specify how long the clip will play in **Time stretch duration**. The speed of the clip will automatically adjust to the specified duration. This feature will not trim the clip when you specify a shorter time.



You can stretch the time of an audio clip on the Timeline by holding [Shift] then dragging the handles on the selected clip.

# Applying fade-in/out

Background music that starts and ends gradually is commonly used to create smooth transitions.

## To apply fade effects to your audio clips

• Click the **Fade-in** and **Fade-out** buttons.

## **Using the Sound Mixer**

The key to making narrations, background music, and existing audio of your video clips blend well together is to control the relative volume of your clips.

### To blend the different audio tracks in your project

- Click the **Sound Mixer** button and on the **Toolbar**.
  - Note: If the Audio Type is set to 3/2 in the Project Properties Audio Settings, the Surround Sound Mixer is displayed. If the Audio Type is set to 2/0 Stereo mode, the 2-Channel Mixer is displayed. You can verify these settings by going to Settings > Project Properties, clicking Edit in the Project Properties dialog box, and then clicking the Compression tab in the Edit Profile Options dialog box.
  - For information about using the **Surround Sound Mixer**, see "Using the Surround Sound Mixer" on page 120.
  - For information about using the 2-Channel Mixer, see "Adjusting stereo channels" on page 119.

# Adjusting stereo channels

In stereo files (two channels), a single waveform represents the left and right channels.

#### To use stereo mode

- 1 Go to Settings > Project Properties.
- 2 In the Project Properties dialog box, choose a format from the Project format drop-list.
- 3 Click Edit.
- 4 In the Edit Profile Options dialog box, click the Compression tab.

Audio 119

- 5 In the Audio format drop-list, choose Dolby Digital Audio.
- 6 In the Audio Settings area, choose 2/0 (L, R) from the Audio Type drop-list box.
- 7 Click the **Sound Mixer** button in the toolbar.
- 8 Click on the Music Track.
- 9 Click Play in the Options Panel.
- **10** Click the music note symbol in the center of the Surround Sound Mixer and adjust depending on your preferred sound position.

**Note:** Moving the note symbol will affect the sound coming from your preferred direction.

11 Drag Volume to adjust the volume level of the audio.

# Using the Surround Sound Mixer

Unlike a stereo stream that carries only two audio channels, Surround Sound has five separate audio channels encoded into one file which is delivered to five speakers and one sub-woofer.

The Surround Sound Mixer has all the controls to position sounds around the listener, outputting audio through the 5.1 configuration of multiple speakers. You can also use this mixer to adjust the volume for stereo files, making it sound as if the audio moves from one speaker to another.



# Mixing Surround Sound

All audio channels in Surround Sound have a set of similar controls that you will find in the stereo configuration of this panel, plus a few more specific controls.

- **Six-channel VU Meter** Front Left, Front Right, Center, Sub-woofer, Surround Left, Surround Right.
- **Center** Controls the amount of output sound from the center speaker.
- Sub-woofer Controls the amount of low-frequency sound output.

#### To use Surround Sound mode

- 1 Go to Settings > Project Properties.
- 2 In the Project Properties dialog box, choose a format from the Project format drop-list.

3 Click Edit.

- 4 In the Edit Profile Options dialog box, click the Compression tab.
- 5 In the Audio format drop-list, choose Dolby Digital Audio.
- 6 In the Audio Settings area, choose 3/2 (L, C, R, SL, SR) from the Audio Type drop-list box.
- 7 Click the **Sound Mixer** button **I** in the toolbar.
- 8 Click the music note symbol in the center of the Surround Sound Mixer. Drag it to any of the six channels depending on your sound position preference. Repeat steps 1 and 2 in using stereo mode.
- 9 Drag the Volume, Center and Sub-woofer sliders to adjust sound controls of your audio Note: You can also adjust the sound position preference of your tracks in Video, Overlay and Voice. To do this, click your preferred track button and repeat steps 2 to 3.

# **Duplicating an audio channel**

Audio files sometimes separate the vocal sound from the background audio and put them in different channels. Duplicating an audio channel allows you to mute the other channel.



To duplicate an audio channel, click the **Sound Mixer** button in the toolbar. Click the **Attribute** tab and select **Duplicate audio channel**. Choose which audio channel to duplicate this may be **Left** or **Right**.



In recording voice-overs using the microphone, it will be recorded on one channel only. You can improve the audio volume by using this feature to duplicate across channels.

# Applying audio filters

Corel VideoStudio allows you to apply filters to your audio clips in the **Music** and **Voice** Tracks. You can also apply audio filters to video clips that include audio.

## To apply audio filters

- 1 In the **Library**, click the **Filter** button **FX** to display the filters.
- 2 Click the **Show Audio Filters** button (10) to display only the audio filters.
- **3** Drag the audio filter to the Timeline and drop it onto an audio clip or a video clip that includes audio.

Audio 121



You can also apply an audio filter from the **Options** panel when an audio clip is selected. In the **Music & Voice** tab of the **Options** panel, click **Audio Filter**. In the **Available filters** list, select the desired audio filters and click **Add**. An audio filter can be customized if the **Options** button is enabled. Click **Options** to open a dialog box where you can define the settings for the particular audio filter.



Corel VideoStudio lets you create professional-looking titles, complete with special effects, in minutes. For example, you can add opening and closing credits, captions, or subtitles.

This section contains the following topics:

- Using the Title Safe area
- Adding titles using the Library
- · Adding titles with the Subtitle Editor
- Formatting text
- Creating titles for the Library
- Applying text effects and animation
- Converting titles to image and animation files

# Using the Title Safe area

The title safe area is the rectangular white outline on the Preview Window. Keeping the text within the bounds of the title safe area will make sure the title does not get cut off at the edges.



#### To show or hide the title safe area

- 1 Click Settings > Preferences.
- 2 Under the General tab, click Display title safe area on Preview Window.

# Adding titles using the Library

You can add titles when the **Title** category is active in the **Library**. You can add one or more simple titles or use presets to add animated titles, such as rolling credits at the end of your movie. You can also save custom presets.

Titles and subtitles 123

# To add multiple titles directly on the Preview Window

- 1 Click **Title T** in the **Library** panel.
- 2 Double-click the **Preview Window**.
- 3 In the Edit tab of the Options panel, select Multiple titles.
- **4** Use the controls in the Navigation area of the Player panel to scan your movie and select the frame where you want to add a title.
- **5** Double-click the Preview Window and type your text. Click outside the text box when you are done typing.
- 6 Repeat steps 4 and 5 to add more titles.



You can add multiple titles and modify the attributes of each title.



Title clips can be placed on Title, Video, and Overlay tracks.

### To add a preset title to your project

- 1 Click **Title T** in the **Library** panel.
- 2 Drag and drop the preset text onto the **Timeline**.

**Note:** You can modify a preset title by double-clicking it on the Preview Window and entering new text. Open the **Options Panel** to edit the title attributes.

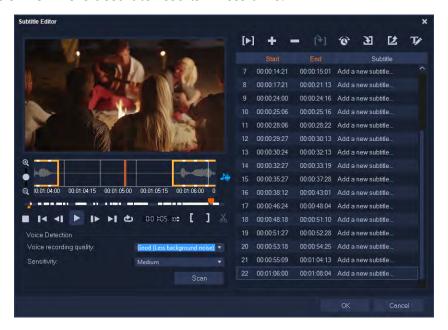
## To save your title as a My Favorite preset

Right-click a title clip in the Timeline and click Add to My Favorites. You can access your title preset in the Library by choosing My Favorites in the Gallery drop-list.
 If you want to save specific filter customizations for your title, in the Options panel, click the Attribute tab, and after customizing the filter settings, click the Add to My Favorites button to the right of the filter list.

### Adding titles with the Subtitle Editor

The **Subtitle Editor** lets you add titles to video or audio clips. Easily add on-screen narration to slideshows or song lyrics to music videos. Use timecodes to match subtitles to clips

precisely when adding subtitles manually. You can also add subtitles automatically using **Voice Detection** for more accurate results in less time.



#### To launch the Subtitle Editor

- 1 Select a video or audio clip in the **Timeline**.
- Click the Subtitle Editor button .The Subtitle Editor dialog box appears.



You can also launch the **Subtitle Editor** dialog box by right-clicking a selected video or audio clip in the **Timeline** and choosing **Subtitle Editor**.

## To add subtitles manually with the Subtitle Editor

- 1 In the **Subtitle Editor** dialog box, drag the **Scrubber** or play the video to the part where you want to add titles.
- 2 Using the playback controls or manual scrubbing, click the Mark in and Mark out buttons to define the duration of each subtitle.

  Each subtitle segment manually added will appear in the Subtitle list.

**Note:** You can also click the **Add a new subtitle** button to add a subtitle segment on the current location of the scrubber. If you click this button while the scrubber is on an existing subtitle segment, the program will seamlessly create an end point of the existing subtitle segment and the start point of a new subtitle segment.

Titles and subtitles 125



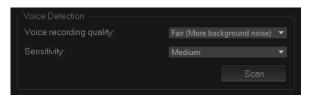
Click the **Waveform view** button to display the audio waveform of the video clip. This is helpful in determining areas that have significant audio levels.

## To add subtitles automatically with the Subtitle Editor

- 1 In the Voice Detection area, select settings in the Voice recording quality and Sensitivity drop-lists that correspond to the characteristics of the audio quality in your video.
- 2 Click Scan.

The program will automatically detect subtitling segments based on audio levels.

Note: Voice Detection will be activated only if your video clip has audio.





For better voice detection results, it is best to use videos with clear speech and less background noise. This feature works best for video tutorials, speeches and video presentations.

### To import subtitle files using the Subtitle Editor

The subtitle segments are added to the **Subtitle** list.

- 1 Click the **Import subtitle file** button and browse for subtitle files that you want to import.
- 2 Click Open.

The selected subtitles appear in the **Subtitle** list.

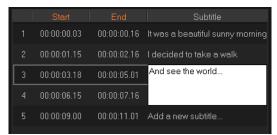


All subtitle segments previously added manually or automatically, along with its properties, will be replaced by the selected subtitle files.

## To edit subtitles by using the Subtitle Editor

1 For each subtitle in the **Subtitle** list, click the default text to activate the text box and type the text you want. Click outside the text box when you finish editing the text.

Repeat this step for all subtitle segments.



2 You can further customize titles in your project by using the following options:

Part	Description
_	Delete selected subtitles — Deletes the selected subtitle segment
[+]	Join subtitles — Merges two or more selected subtitles
•	Time offset — Introduces timing offsets for the entry and exit of subtitle segments
T <sub>p</sub>	<b>Text Options</b> — Launches a separate dialog box where you can customize the font attributes, style and position of subtitles

#### 3 Click OK.

All segments in the Subtitle list will appear on the Title Track in the **Timeline**.

### To save subtitle files using the Subtitle Editor

- 1 Click the **Export subtitle file** button and browse for the path where you want to save the subtitle file.
- 2 Click Save.

# Formatting text

You can format your text by changing the font, text alignment, and text direction. For example, the text direction can be set for left-to-right, right-to-left or vertical. You can also add borders and shadows, or rotate the text. Add a text backdrop to superimpose your text on a solid or gradient shape to make it stand out. You can also define how long a title clip appears by adjusting the title clip duration.



Text direction is one of many formatting settings for titles.

Titles and subtitles 127

#### To edit titles

- 1 In the **Timeline**, select the title clip on the Title Track and click the Preview Window to enable title editing.
- 2 Modify the properties of the title clip by using the different options in the **Edit** and **Attribute** tabs of the **Options Panel**.

If you plan to change the text direction, it's best to set this before you start to type.



### To rotate text in the Preview Window

- 1 In the Title Track, double-click a title.
- 2 In the Preview Window, yellow and purple handles appear around the text.



3 Click and drag a purple handle to the position you want.



You can also rotate text using the **Options Panel**. In the **Edit** tab, specify a value in **Rotate by degree** to apply a more precise angle of rotation.

## To add a text backdrop

- 1 Enable the **Text backdrop** check box.
- 2 Click the Customize text backdrop attributes button **to** open the **Text Backdrop** dialog box.
- 3 Choose the Solid background bar or Fit with text option.

  If you choose Fit with text, choose a shape from the drop-list and set a value in the Enlarge box.
- 4 In the **Color setting** area, choose the **Solid** or **Gradient** option, and click the color swatch to set the background color.

- **5** If you choose **Gradient**, click an arrow button to set the direction of the gradient and click the second color swatch to set a second color.
- **6** In the **Transparency** box, enter a value. Higher numbers increase the transparency.
- 7 Click OK.



## To modify text border, transparency, and add shadows

• Click the **Border/Shadow/Transparency** button **and** set attributes using the **Border/Shadow/Transparency** dialog box.



## To apply a title preset

- 1 Click the Title clip on the **Timeline** and then double-click the title on the Preview Window.
- 2 In the **Edit** tab, click the **Title Preset Style** drop-list and click a thumbnail to apply the effect.



### To adjust the duration of title clips

- Do one of the following:
  - In the Timeline, drag the handles of the clip

Titles and subtitles 129

• Select the clip in the **Timeline**, open the **Options Panel**, click the Edit tab, and enter a value in the **Duration** box

## Creating titles for the Library

You can create titles that include text, graphic elements, and motion, and save them as title templates (presets) in the **Library**.



This custom title template includes editable text and a balloon logo that floats away (Customize Motion).

### Before you start

- Import any custom graphic elements to the **Library**, such as logos, graphics, or lines. PNG format is usually preferred because it supports transparency.
- If you want to apply motion to non-text elements, it's best to add the elements to an overlay track and add motion before adding them to the title text.

## To create a title template

- 1 Do one of the following:
  - In the **Timeline**, double-click a **Title** track to activate the text entry mode in the Preview Window of the **Player** panel. Set the text formatting options in the **Options** panel and double-click in the Preview Window to enter the text.
  - Click **Title T** in the **Library** panel, and drag a thumbnail for a title template to the **Title** track in the **Timeline**.
- 2 Drag any additional graphics you want to add from the Library to the title.
  - A number appears in the upper-right corner of the title template to indicate how many objects are in the group.

**Note:** If you want to edit an object, add it to an overlay track first, make the edits you want (attributes such as color, custom motion, etc...). You can then drag the object from the overlay track to the title.



- **3** To select individual objects in the group, in the **Timeline**, click the number in the upper-right corner of the title group. The object will be selected in the **Player** panel and you can adjust the size or position.
- 4 To save the title template to the **Library**, in the **Title** track, right-click the title and choose **Merge and save as template** > **Custom**, or choose **Add Folder** and type a name. The title is added to the **Title** category of the **Library**, within the assigned folder. To rename the title, select it in the **Library**, click the label for the thumbnail, and type a new name.



Only one element of the title template can use custom motion.

# Applying text effects and animation

Apply motion to your text using title animation tools, such as Fade, Moving Path, and Drop. You can also apply filters to your text using preset Title Effects such as Bubble, Mosaic, and Ripple. The title filters are in a separate **Title Effects** category.

### To apply animation to the current text

- 1 In the Title Track, double-click a title.
- 2 In the **Options** panel, click the **Attribute** tab.
- **3** Enable the **Animation** option, and mark the **Apply** check box.
- 4 Select a category from the **Select the type of animation** drop-list and select the specific preset animation from the box under **Apply**.
- 5 Click the **Customize animation attributes** button to open a dialog box where you can specify animation attributes.
- 6 In some animation effects, you can drag the **Pause duration handles** that appear in the Navigation area of the Player panel to specify how long the text will pause after it enters and before it exits the screen.



Pause duration handles

## To apply title filters to the current text

1 In the **Library**, click **Filter** and choose **Title Effects** in the **Gallery** drop-list. The **Library** displays the thumbnails of various filters under the **Title Effects** category.

Titles and subtitles 131

- 2 Drag the filter thumbnail from the **Library** onto your clip in the **Timeline**.

  Note: By default, the filter applied to a clip is always replaced with the new filter dragged onto the clip. In the **Effect** tab of the **Options Panel**, clear **Replace last filter** to apply multiple filters to a single title.
- **3** To customize the title filter, in the **Options** panel, click the **Effect** tab, and do one of the following:
  - Click a thumbnail in the drop-list to the left of **Customize Filter**.
  - Click **Customize Filter**. Available options depend on the selected filter.

**Note:** When there is more than one title filter applied to a clip, you can change the order of filters by clicking the **Move filter up** arrow or **Move filter down** arrow that appear to the right of the filter list on the **Attributes** tab. Changing the order of the title filters will have different effects on your clip.

# Converting titles to image and animation files

You can convert a frame in a title clip to an image file (PNG) or you can convert title clips with moving elements to animation files (UISX). The PNG and UISX file are saved as Alpha channel files. Why convert titles? You can add converted titles to overlay tracks, extending the creative options and attributes that you can use. For more information, see "Overlay clips" on page 151.



Ensure that the text in your title is final before converting—converted text cannot be edited.

### To convert a title to an image (PNG)

- 1 In the Timeline, click a clip in the **Title** track.
- 2 Scrub to the frame that you want to capture as an image.
- 3 Right-click the clip and choose **Convert this frame to PNG.** The PNG file is added to the Library (**Photos** category).

## To convert a moving title to an animated file (UISX)

- 1 In the Timeline, click a **Title** track clip that includes moving elements.
- **2** Right-click the clip and choose **Convert to animation**. The UISX file is added to the Library (**Videos** category).



You can use the **3D Title Editor** to create three-dimensional titles for your movie projects. You can control the look of the text as well as how it moves across the screen. For example, you can create a metallic gold title that spins on and off screen or you can create a stone-textured title where each letter or word scales and moves independently.

For information about standard (2D) titles, see "Titles and subtitles" on page 123.

This section contains the following topics:

- 3D Title Editor workspace
- Creating and editing 3D titles

## 3D Title Editor workspace

The 3D Title Editor window consists of the following components:



Areas of the 3D Title Editor: 1. Presets panel; 2. Player panel; 3. Settings panel; 4. Timeline panel; 5. Object List (Layers); 6. Timeline toolbar

- 1 Presets panel: Lets you get started quickly with ready-made Text Objects and styles, including lighting, camera, and material options.
- **2 Player panel**: Lets you view your 3D text and work interactively with it to set position, orientation, and more. Use the playback controls to preview your 3D title.
- 3 Settings panel: Customize your text by choosing settings for Text, Color, Texture, Bevel, Opacity, Lights, and more.
- **4 Timeline panel:** Lets you add, edit, and remove keyframes for the text object properties. You can also add and delete text object layers, access the **Object List**, and use the tools

3D Title Editor

- and controls on the Timeline toolbar. The scrubber in the Timeline panel is synchronized with the Player panel.
- **5 Object List**: If you have multiple text objects in your project (separate words or letters, for example), you can choose which object you want to display in the Timeline by using the Object List drop-down menu above the key frame headers. The name of the layer is determined by the text that you type in the **Text Settings** box.
- **6 Timeline toolbar**: Lets you type specific values for key frames and switch between **Move**, **Rotate**, and **Resize** modes. You can also add or delete text object layers from the timeline (buttons on the left side) and control which surfaces of the object are affected by surface-related settings (such as color and material).

# Creating and editing 3D titles

Here are the basic steps for creating a 3D title:

- 1 Choose a preset text object or work with the default text object.
- 2 Modify the settings for the text object to get the look you want.
- 3 In the Timeline panel, start setting keyframes so you can apply changes to the style and movement of the text.
- **4** Preview your project in the Player panel, adjusting settings and keyframes to get the effect you want.
- **5** Click **OK** to return to the main application, where your 3D title appears on the timeline. Experimenting is a good way to learn what is possible in terms of text styles and movements.

#### To create or edit a 3D title

- 1 In VideoStudio, do one of the following:

  - In the **Library** panel, choose the **Title** > **3D Title** category, drag a title to the timeline, and double-click it.
  - Double-click an existing 3D title in the Timeline.

The **3D Title Editor** opens.

2 In the **Settings** panel, replace the default text by typing your text in the **Text Settings** box.



If you want to have more than one text object (so you can apply different properties to letters or words), in the **Presets** panel, choose **Objects** > **Text Objects**, and click a preset thumbnail for each object that you want to add, using the **Text Settings** box to type the

final text for each object. At any point, you can select a specific text object for editing by clicking the object in the Player panel.

- 3 In **Text Settings** area of the **Settings** panel, format the text by using any of the spacing, alignment, font, and size options.
- **4** To determine the properties for your title in the starting position, in the Timeline panel, click the name of the property that you want to adjust and do one of the following:
  - For **Position**, **Orientation** (**Rotate**), and **Scale** (**Resize**), drag in the Player panel or for precise settings, type values in the **X**, **Y**, and **Z** boxes on the Timeline toolbar.
  - For **Color** and **Opacity**, in the **Settings** panel, adjust the settings in the **Color** and **Opacity** areas.

If you want to adjust the **Texture**, **Bevel**, **Lights**, or **Camera** settings for the title, adjust the settings in the corresponding area or in the **Presets** panel, choose presets from **Scene** and **Object Style**. These settings do not have keyframes.

- 5 In the Timeline panel, set any additional keyframes (for example your end point keyframes), and set the properties you want for each keyframe.
  If you simply have a start and end keyframe, a gradual change is applied between the two keyframes. Set more frequent keyframes for faster changes.
- **6** Use the playback controls in the Player panel to preview your 3D title.
- 7 When you are finished editing your 3D title, click **OK** to close the **3D Title Editor** window. Your title is inserted in the Timeline (**Title** track).



You can apply different surface-related settings, such as color and material, to selected surfaces. For example, you can apply blue to the front face, green to the back face, and a wood grain material to the sides. Click any of the following buttons to select or deselect the corresponding surface:

- Select front face
- Select front bevel face
- Select side face
- Select back bevel face
- **Select** back face

You can copy and paste keyframes for individual properties. On the Timeline, right-click a keyframe and from the context menu, choose **Copy keyframe**. Move to a new position along the Timeline, right-click, and from the context menu, choose **Paste keyframe**.

When rotating (adjusting **Orientation**), you can press **Ctrl** while dragging the text in the Player panel to adjust only the **Z** value.

3D Title Editor



Transitions can help your movie switch smoothly from one scene to the next. They can be applied to single clips or in between clips on all tracks in the Timeline. Effective use of this feature can add a professional touch to your movie.

This section contains the following topics:

- Adding transitions
- Saving and deleting transitions
- Morph Transitions
- Seamless Transitions (Ultimate)

# Adding transitions

There are many types of transitions in the **Library**. For every type, you choose a specific preset effect by using the thumbnails. For example, you can choose from popular transition styles such as **Dissolve**, **Crossfade**, and **Fade to black**.



#### To add a transition

• In the **Edit** workspace, do one of the following:

Transitions 137

- Click **Transitions** in the **Library** and select from various categories of transitions from the drop-list. Scroll through the transitions in the **Library**. Select and drag a transition thumbnail between two video clips in the **Timeline**. Drop your transition and it will snap into place. You can only drag and drop one transition at a time.
- Double-click a transition in the **Library** to automatically insert it into the first empty transition slot between two clips. Repeat this process to insert a transition at the next cut. To replace a transition in your project, drag the new transition onto the transition thumbnail for replacement in the **Storyboard View** or **Timeline View**.
- Overlap two clips in the **Timeline**.

#### To add a transition automatically

- 1 Select **Settings** > **Preferences** > and click the **Edit** tab.
- Under Transition Effect, enable Automatically add transition effect
   The default transition is added automatically between clips.
   Note: A default transition is always added automatically between overlapping clips, whether the Automatically add transition effect in Preferences is enabled or not.

#### To add a selected transition to all video track clips

- 1 Select the thumbnail of the transition.
- 2 Click the Apply current effect to video track button and select Apply current effect to video track.

### To add random transitions to all video track clips

• Click the **Apply random effect(s) to video track** button **a**.

#### To customize a preset transition

- 1 Double-click a transition effect in the **Timeline**.
- 2 Modify the attributes or behavior of the transition in the **Options Panel**.





To further customize transitions, you may also do one of the following:

- In **Default transition effect duration**, enter a value for the number of seconds you want transitions to take place in between clips.
- Choose a transition effect from the **Default transition effect** drop-list.
- In **Random effects**, click the **Customize** button and select transitions you want to use in your project when transitions are added in between clips.

# Saving and deleting transitions

You can collect your favorite transitions from different categories and save them in the **My Favorites** folder. This way, you can easily find the transitions that you use most often. You can also delete transitions that you do not use.

#### To save a transition in My Favorites

- 1 Select the thumbnail of the transition.
- 2 Click the Add to My Favorites button to add the transition in the Favorites Library list

## To delete a transition from a project

- Do one of the following:
  - Click on the transition to be removed and press [Delete].
  - Right-click on the transition and select **Delete**.
  - Drag to separate two clips with transition effect.

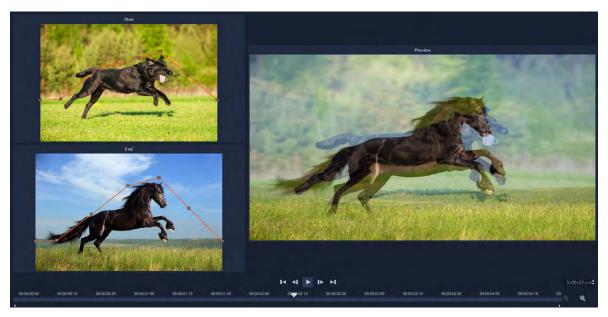
# **Morph Transitions**

The **Morph Transition** creates a fun metamorphosis effect by analyzing the content in one clip and blending it into the content of the next clip.

You can customize how the morph transition occurs by setting a guide line for each clip to help determine the area of focus for the transition, such as a horizon line. You can then preview the transition and make adjustments to the guide line and length (duration) of the transition. The guide line determines how the transition will be applied, so feel free to experiment with the positioning until you achieve a result you like.

Morph transitions work best between clips that have similar reference points and clips that are the same dimensions.

Transitions 139



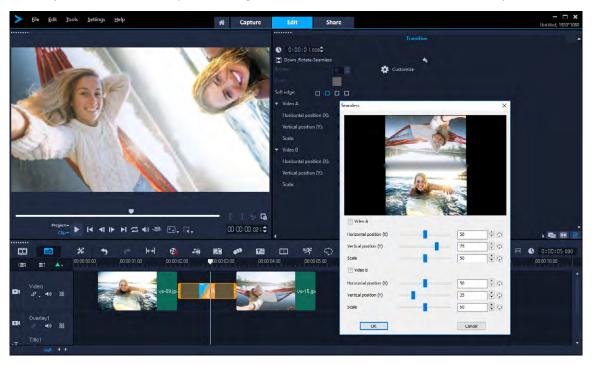
You can set reference points to customize Morph Transition results.

#### To add a Morph Transition

- 1 In the **Library**, click the **Transition** category button , choose **Slide** from the **Gallery** drop-down menu or in the **Search** box, type **Morph**.
- 2 Drag the Morph Transition thumbnail to the Timeline, between two clips.
- 3 Preview the results in the **Player** panel. To adjust the duration of the transition or to set where the transition starts and ends, drag the edges of the transition in the **Timeline**. You can stop here if you like the results.
- 4 If you want to edit the transition, double-click the transition in the **Timeline** to open the **Options** panel, and click **Customize**.
- 5 In the **Morph Transition** window, compare the orange transition guide lines in the **Start** and **End** area.
- 6 In the **Start** area and **End** area, drag to set the nodes for the orange guide line that will be used as a reference point.
  - You can add nodes by clicking the guide line.
  - You can delete nodes by right-clicking a node and choosing **Delete** or **Delete All** (for all but the first and last node).
- 7 In the Preview area, use the playback controls to preview the transition.
- **8** If required, adjust the guide lines to fine tune the transformation.
- 9 Click **OK** to exit the editor and to return to the **Timeline**.

### Seamless Transitions (Ultimate)

The **Seamless** Transitions are motion-based animated effects that blur the passage from one clip to the next, creating what is sometimes known as an invisible cut. Whether the motion is up, down, or to the side, the result is similar to a whip pan effect. Some transitions include rotation and you can edit the transitions to control the zoom level, position, edge softness, and duration. For example, you can zoom in and align the sky in the first clip with a similarly colored sky in the second clip, ensuring that the transition is as seamless as possible.



The Seamless Transition controls let you align the areas that will overlap and blend.

### To apply a Seamless Transition

- 1 In the **Timeline**, decide where you want to place your **Seamless** transition. Make note of which edges you want to use for the transition (for example, the top edges because the sky areas match).
- 2 In the **Library**, click the **Transition** category button **ID**, and choose **Seamless** from the **Gallery** drop-down menu.
- 3 Click a transition thumbnail and preview it in the **Player** panel (in **Clip** mode) to ensure that it will align your target edges.
- 4 Drag the selected thumbnail to the **Timeline**, between two clips.

Transitions 141



- 5 Preview the results in the **Player** panel. To adjust the duration of the transition or to set where the transition starts and ends, drag the edges of the transition in the **Timeline**. You can stop here if you like the results.
- **6** To edit the transition, double-click the transition in the **Timeline** to open the **Options** panel.
- 7 Adjust any of the following settings directly in the **Options** panel, or click **Customize** for a more global view of clip position and size:
  - **Duration**: Sets the overall length of time for the transition.
  - **Soft Edge**: Adjusts the softness of the edge along the transition line for the clips.
  - Horizontal position: Lets you align the left-right (x-axis) position of the clip.
  - Vertical position: Lets you align the top-bottom (y-axis) position of the clip.
  - **Scale**: Adjusts the size of your clips to create a zoom in/zoom out effect. This can also help you maximize the alignment of areas that match in each clip.



8 Review your changes in the **Player** panel.



The Graphic Library contains color clips, objects, frames and animation.

This section contains the following topics:

- Adding color clips
- Adding color patterns
- Adding backgrounds
- Adding objects or frames
- Adding animations
- Customizing objects, frames, and animations

### Adding color clips

Color clips are solid colored backgrounds. You can use the preset color clips or create new color clips in the **Library**. For example, you can insert a black color clip as background for end credits.

#### To select a color clip in the Color Library

- 1 Select **Graphic** from the Library Panel and choose **Color** from the **Gallery** drop-list.
- **2** Choose the desired color as displayed in the **Library** and drag to the Video or Overlay Track.
- 3 To add a color that is not in the **Library**, click the **Add** button beside the **Gallery** drop-list. In the **New Color Clip** dialog box, you can select a color either from **Corel Color Picker** or the **Windows Color Picker**.



Click the Options tab to set the Duration of the color clip in the Options Panel.

## Adding color patterns

Color patterns are decorative backgrounds. You can use the preset color patterns or add an image that you want to use as a new color pattern in the **Library**. For example, you can insert a color pattern as a background for a title.

Graphics 143

#### To select a pattern clip in the Color Patterns Library

- 1 Select Graphic from the Library panel and choose Color pattern from the Gallery droplist.
- **2** Choose the desired pattern as displayed in the **Library** and drag to the Video or Overlay Track.
- **3** To add a pattern that is not in the Library, click the **Add** box beside the **Gallery** drop-list. In the **Browse Graphics** dialog box, choose the file that you want to add to the **Library**.
  - Click the **Options** tab to set the **Duration** of the color clip in the **Options Panel**.

# Adding backgrounds

You can add decorative backgrounds to your videos. The preset backgrounds include a widerange of colorful images that you can use to add visual appeal to your videos.

#### To select a background clip in the Backgrounds Library

- 1 Select **Graphic** from the **Library** panel and choose **Background** from the **Gallery** droplist
- **2** Choose the desired background as displayed in the **Library** and drag to the Video or Overlay Track.
- 3 To add a pattern that is not in the Library, click the **Add** box beside the **Gallery** drop-list.
- 4 In the Browse Graphics dialog box, choose the file that you want to add to the Library.
- **5** Set the **Duration** of the color clip in the **Options Panel**.

### Adding objects or frames

Add decorative objects or frames to your videos as Overlay clips.

### To add an object or frame

- 1 Select **Graphic** from the **Library** panel and choose **Object** or **Frame** from the **Gallery** drop-list.
- 2 Select an object or frame from the **Library** and drag it onto the **Overlay Track** in the **Timeline**.
- 3 In the **Player** panel, adjust the size or position of the object or frame in the preview window.
  - If you want to apply additional changes, in the **Options** panel, choose the options you want from the **Edit**, **Color**, or **Effect** tabs.



Object Frame

# Adding animations

Give more life to your videos by adding animations as Overlay clips.



An Animation overlay (blue wavy bands) give a polished look to a video project.

#### To add an animation

- 1 Select **Graphic** from the **Library** panel and choose **Animation** from the **Gallery** drop-list.
- 2 Select an animation from the **Library** then drag it onto the **Overlay Track**.
- 3 In the Options panel, choose the options you want from the Edit, Color, or Effect tabs.



The Options panel was used to edit an Animation overlay, changing the hue and using Chroma Key to create transparent areas.

Graphics 145

# Customizing objects, frames, and animations

Use the various options available in the **Edit**, **Color**, and **Effect** tabs to customize your object and frame. You can add animation, apply transparency, resize the object or frame, and more.



Video filters are effects that you can apply to clips in order to change their style or appearance. Using filters is a creative way to enhance your clips or correct flaws in your video. For example, you can make a clip look like a painting or improve its color balance.

This section contains the following topics:

- Applying filters
- Marking filters as favorites
- · Applying multiple filters
- Customizing filters

## **Applying filters**

Filters let you apply a wide range of special effects and corrections. For example, the following filters can be found in the **Library**:

- **Cropping** lets you crop clips. You can fill the frame with the cropped result or show a border
- Anti-Shake reduces shake in your videos for a stabilizing effect
- AutoSketch applies a beautiful drawing effect to the video

Filters can be applied alone or in combination with the Video, Overlay, Title, and Audio Tracks.

#### To apply a video filter to a photo or video clip

- 1 Click the **Filter** button **FX** in the **Library** to display the thumbnails of various filter samples.
  - If you want to display the filters in the **Library** by category, choose a filter category from the **Gallery** drop-list box.
- 2 Select the clip in the **Timeline** then choose the video filter from thumbnails shown in the **Library**.
- **3** Drag and drop the video filter onto your clip.
- 4 In the **Options** panel, click **Customize Filter** on the **Effect** tab. Available options depend on the selected filter.
- **5** Preview how your clip looks with the video filter applied to it using the Navigator.

Video filters 147

**a** 

You can show or hide filters in the Library by type by clicking the **Show Video Filters** button or **Show Audio Filters** button .

# Marking filters as favorites

You can collect your favorite filters from different categories by marking them and then storing them in the **My Favorites** folder. This way, you can easily find the filters that you use most often.

#### To mark a filter as a favorite

- 1 Click the **Filter** button **FX** in the **Library** to display the thumbnails of various filter samples.
- 2 Choose the video filter that you want to mark as a favorite from the thumbnails shown in the **Library**.
- 3 Click the Add to My Favorites button to add the filter to the My Favorites category.



You can also save specific filter customizations. In the **Options** panel, click the **Effect** tab for the filter, customize the filter list or **Customize Filter** settings and click the **Add to My Favorites** button that displays to the right of the filter list.

### To find and apply a favorite filter

- 1 In the Library panel, choose **My Favorites** category from the **Gallery** drop-list box.
- **2** Choose the favorite video filter that you want to use from the thumbnails shown in the **Library**.

## Applying multiple filters

By default, the filter applied to a clip is always replaced with the new filter dragged onto the clip. Uncheck **Replace last filter** to apply multiple filters to a single clip. Corel VideoStudio allows you to apply a maximum of five filters to a single clip.

You can also choose the filter to be previewed through the selection in the view toggle. In the event that you choose to render your project, only enabled filters will be included in your movie.

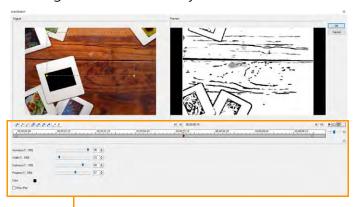
When there is more than one video filter applied to a clip, you can change the order of filters by clicking  $\square$  or  $\square$ . Changing the order of the video filters will have different effects on your clip.

## **Customizing filters**

Corel VideoStudio allows you to customize video filters in a variety of ways, such as by adding key frames to your clips. Key frames let you specify a different attribute or behavior for your video filter. This gives you the flexibility to determine how your video filter will look at any point in a clip and to vary the intensity of an effect over time.

#### To set key frames for your clips

- 1 Drag and drop a video filter from the **Library** onto a clip on the Timeline.
- 2 In the Options panel, click Customize Filter on the Effect tab.
  - The dialog box for the video filter appears.
  - **Note:** The available settings are different for each video filter.
- 3 In the **Key frame controls**, drag the **Scrubber** or use the arrows to go to the frame where you'd like to change the attributes of your video filter.



Key frame Controls

**Note:** You can use the mouse wheel to zoom in or out of the Timeline Control bar for precise placement of key frames.

- **4** Click **Add key frame** ★ to set that frame as a key frame in the clip. You can adjust the video filter settings for that particular frame.
  - **Note:** A diamond-shaped mark **●** on the **Timeline Control** bar appears and indicates that the frame is a key frame in the clip.
- **5** Repeat steps 3 and 4 to add more key frames to your clip.
- 6 Use the **Timeline** controls to edit or to go to a key frame in the clip.
  - To delete a key frame, click **Remove key frame** \_.
  - Click **Reverse key frames** Ito reverse the sequence of key frames on the Timeline such that the sequence starts with the last key frame and ends with the first key frame.
  - To move to the succeeding key frame, click **Go to next key frame** ...
  - ullet To move to the key frame prior to the one selected, click **Go to previous key frame**  $\underline{ullet}$ .
- 7 Click Fade In 🖪 and Fade Out 🕒 to establish fade points in your filter.

Video filters 149

- **8** Adjust the video filter settings according to your preferences.
- **9** Preview the changes you've made by clicking **Play** ▶ in the Preview Window of the dialog box.
- 10 Click **OK** when finished.

**Note:** To preview the clip with the video filter applied, use the Preview Window or an external device such as a TV monitor or DV camcorder.

To choose the display medium, click , then click to open the **Preview Playback Options** dialog box.



Adding multiple Overlay Tracks gives you more creative possibilities for your movie. You can superimpose clips over a background video with portions of the overlay being transparent, use a video mask, or add objects and frames to your video and control how they blend with the background.

This section contains the following topics:

- · Adding clips to overlay tracks
- Adjusting overlay clips
- Combining Overlay clips to create an Ultra HD (4K) video
- Applying motion to an overlay clip
- Adjusting the overall transparency of overlay clips
- Adding borders to overlay clips
- Blending overlay clips with the background
- · Adding a mask frame
- Using video masks with overlay clips

## Adding clips to overlay tracks

Drag media files to the Overlay Track on the **Timeline** to add them as overlay clips for your project.

#### To add a clip to the Overlay Track

- 1 In the **Library**, select the media folder that contains the Overlay clip that you want to add to your project.
- 2 Drag the media file from the **Library** to the **Overlay Track** on the **Timeline**.
  - **Note:** You can also use color clips as Overlay clips. To add more tracks, see "Adding and swapping tracks" on page 67.
- **3** To customize the Overlay clip, select the clip and edit it interactively in the **Player** panel preview window, or open the **Options** panel, and modify the settings.

### Adjusting overlay clips

Achieving different effects for your projects is easy when you know how to use Overlay clips and tracks.

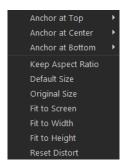
Overlay clips 151

#### To split a clip in the Video and Overlay Tracks

- 1 In the **Timeline**, select a clip.
- 2 In the navigation area of the **Player** panel or in the **Timeline**, move the scrubber to the point where you want to split the clip.
- 3 In the **Player** panel, click the **Split Clip** button 😓.

### To reposition an Overlay clip

- 1 In the Timeline, select the clip.
- **2** Do one of the following:
  - Drag the Overlay clip to the desired area on the Preview Window. It is recommended that you keep the Overlay clip within the title safe area.
  - In the Preview Window, right-click the clip and choose an option from the context menu.
  - In the **Options** panel, click **Alignment Options** on the **Effect** tab, and click an option from the drop-list.



#### To resize an Overlay clip

• In the Preview Window, drag the handles on the Overlay clip to resize it.

Note: If you drag a corner handle, it will keep the aspect ratio when you resize the clip.

#### To distort the Overlay clip

• In the Preview Window, drag the green handles on the Overlay clip to distort it.



Drag the green nodes to distort a clip.

### Combining Overlay clips to create an Ultra HD (4K) video

Some Ultra HD (4K resolution) videos are created by combining four full HD files shot with a 4K camera. Apart from adding Overlay effects, you can use Overlay Tracks to assemble HD videos into one Ultra HD (4K) movie.

#### To merge HD files using Overlay clips

- 1 In the **Library**, select the media folder that contains the four HD files that you want to assemble.
  - Each file represents a quadrant of the Ultra HD (4K) video.
- 2 Drag each file from the Library to an Overlay Track on the Timeline.
- 3 Resize the Overlay clips to make them fit into the **Preview Window**.
- **4** Reposition the Overlay clips. For more information, see "Adjusting overlay clips" on page 151.



Even if you have not rendered the video, the Ultra HD (4K) video can be imported into a new project as a \*.vsp file for easier editing.

# Applying motion to an overlay clip

### To apply motion to an Overlay clip

1 In the **Timeline**, select an overlay clip.

Overlay clips 153

- 2 In the Options panel, click the Effect tab.
- 3 In the **Direction/Style** area, do one of the following:
  - Enable the **Basic Motion** option, and click an **Enter** and **Exit** arrow.
  - Enable the **Advanced Motion** option, and click **Customize Motion**. For more information, see "Customizing motion" on page 167.



**Pause duration** determines how long your pause will be in the designated area before the clip exits the screen. If you applied motion to the Overlay clip, drag the **Trim** markers to set the **Pause duration**.



# Adjusting the overall transparency of overlay clips

You can quickly adjust the overall transparency of an overlay clip to achieve a semi-transparent effect. For more control over how the overlay clip blends with the background, see "Blending overlay clips with the background" on page 155.

You can also adjust the transparency of tracks using Track Transparency mode. See "Track transparency" on page 104.

#### To apply transparency to an Overlay clip

- 1 In the **Timeline**, select an overlay clip.
- 2 In the Options panel, click Mask & Chroma Key on the Effect tab.
- 3 Mark the **Apply Overlay Options** check box, and enter a value in the **Transparency** box in the upper left corner.



## Adding borders to overlay clips

You can add a border to an overlay clip. For example, you add a white border around an image to make it look more like a photo.

#### To add a border to an Overlay clip

1 In the **Timeline**, select an overlay clip.

- 2 In the Options panel, click Mask & Chroma Key on the Effect tab.
- **3** Enter a value in the **Border** box to set the thickness of the border for the Overlay clip.
- 4 Click the **Border** color box located beside the arrow keys to set the color of the border.



# Blending overlay clips with the background

You can specify how overlay clips blend with the background by using different "Key" options:

- **Chroma Key** used to remove a specific color from an overlay clip. For example, if you capture a subject against a "green screen" background or cover part of a subject with green, Chroma Key can be used to remove the green. You can then place the subject on another background to change the surroundings or create a special effect such as the appearance of a hovering object.
- **Gray Key** adjusts the transparency of the overlay clip based on tone (light/dark values), rather than color.
- Multiply multiplies the value of the overlay colors with the underlying colors and divides by 255. The result is darker than the original colors. White has no blend effect; black always blends to black. You can use the Blend/Opacity slider to adjust the transparency.
- Add Key adds the color values of the overlay clip with the values of the underlying colors. You can use the Blend/Opacity slider to adjust the transparency.

The settings available depend on the type of key that you choose. Experiment with the settings to achieve the look you want.



Overlay clips 155



You can use Chroma Key to replace the background behind subjects captured against a green screen.

#### To blend an overlay clip with the background by using Key settings

- 1 In the **Timeline**, select an overlay clip.
- 2 In the Options panel, click Mask & Chroma Key on the Effect tab.
- **3** Enable the **Apply Overlay Options** check box, then choose one of the following settings from the **Type** drop-list:
  - Chroma Key
  - Gray Key
  - Multiply
  - Add Key

If you choose **Chroma Key**, use the eye dropper tool **to pick a color in the Preview Window and adjust the color similarity value (to the right of the eye dropper tool). The transparency effect appears in the Preview Window.** 

- **4** Experiment with any of the following settings to achieve the results you want (availability of controls depends on the Type you select):
  - **Gamma** affects image contrast and can be used to lighten (move control to the right) or darken (move control to the left) the overall image
  - Min can be moved to the right to darken the image's lightest pixels
  - Max can be moved to the left to lighten the image's darkest pixels
  - **Cutoff** can be moved to the right to set a new black point for the image (more black in the image).
  - Threshold can be moved to the left to set a new white point for the image (more white in the image).

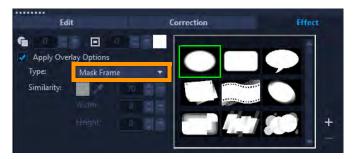
If you choose **Multiply** or **Add Key**, you can also adjust the **Blend/Opacity** setting to adjust transparency.

•

You can crop an overlay clip by adjusting the **Width** and **Height** values. You can invert the blend settings by enabling the **Invert** check box.

## Adding a mask frame

Adding a mask or a matte to an overlay clip applies a shape around it that you can render opaque or transparent.



#### To add a mask frame

- 1 In the **Timeline**, select an overlay clip.
- 2 In the Options panel, click Mask & Chroma Key on the Effect tab.
- 3 Click Apply Overlay Options then choose Mask Frame from the Type drop-list.
- 4 Select a mask frame.

  If you want to choose a mask that you have created, you can import it by clicking the Add mask item(s) button 

  ♣, and browsing for the image file.
- 5 Watch the Preview Window to see how the new settings affect the image.



**Note:** You can use any image file for a mask. If your mask is not in the required 8-bit bitmap format, Corel VideoStudio automatically converts the mask. You can use programs such as Corel PaintShop Pro and CorelDRAW to create an image mask.

# Using video masks with overlay clips

A video mask is an animated way to reveal the content of an overlay clip. It is similar to a transition in function. You can apply an existing video mask, create and import your own video mask, or import a third-party video mask.



A video mask is a creative way to reveal the underlying content.

Overlay clips 157

There are many ways to make your own video masks. For example, start a new project, and from the **Graphics** category in the Library, add a black color swatch and a white color swatch to the Timeline. Apply a transition and match the duration to the two swatches. Save your work to a video file (such as MPEG 4, AVI, or MOV). You can then import the file as a video mask.

You can also use the Mask Creator to create video masks. For more information, see "Working with the Mask Creator (Ultimate)" on page 99.

#### To apply a video mask to an overlay clip

- 1 In the **Timeline**, select an overlay clip.
- 2 In the Options panel, click Mask & Chroma Key on the Effect tab.
- 3 Click Apply Overlay Options then choose Video Mask from the Type drop-list.
- 4 Select a mask.
  - If you want to choose a mask that you have created, you can import it by clicking the **Add mask item(s)** button **!**, and browsing for the video file.
- **5** Watch the Preview Window to see how the new settings affect the image.



You can remove files from the video masks list by clicking the thumbnail for the mask, and clicking the **Remove mask item** button **.** 

You can create a folder for video masks in the default user content folder:

...Documents/Corel VideoStudio Pro/22.0/.



Corel VideoStudio lets you create tracking paths in video clips and track particular elements in your video. Motion Tracking eliminates the multiple and repetitive steps of adding objects into the **Timeline** and the use of key frames to induce movement.

Furthermore, the motion tracking feature lets you create seamless optical illusions that allow for titles to be embedded into the video clips and follow camera movement, just like shooting video with titles originally in the footage!

Customize motion lets you create your own motion paths that you can save to the Path folder in the Library.

This section contains the following topics:

- Tracking motion of video objects
- Matching motion to a tracking path
- Customizing motion

### Tracking motion of video objects

The **Track Motion** feature allows you to track the motion of a point or area in a video and automatically generate a tracking path in the process.

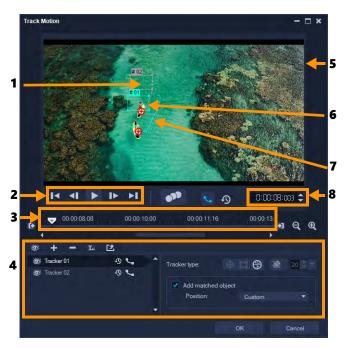
**Track Motion** works in tandem with the **Match Motion** feature. **Match Motion** allows you to make your overlays and titles automatically follow the tracking path that you create.



If you prefer to manually animate overlays and titles to match your main background video, you can use the **Customize Motion** feature.

Motion tracking 159

# **Motion Tracking interface basics**



Track Motion dialog box

Part	Description
1 — Tracker	Specifies the object being tracked to create the tracking path.  This can also appear as an area depending on the selected tracker type.
2 — Playback Control	Buttons that control video playback.
3 — Timeline Control	The Video Timeline along with zoom and track in/out controls.
4 — Tracker Control	Buttons and options that let you control the properties of the trackers, tracking paths and matched objects.
5 — Preview Window	Shows the current video being played.
6 — Matched object	Where the matched object is placed.
7 — Tracking path	The path of the motion tracked by the program.
8 — Timecode	Lets you jump directly to a specific part of the video by specifying the exact timecode.

#### **Track Motion buttons and options**

	<b>Track Motion</b> — Tracks the motion of the selected tracker in the video clip automatically.
49	Reset to default position — Discards all actions.
( )	<b>Track in / Track out</b> — Specifies a working range in the video clip where motion is tracked.
<b>@ Q</b>	<b>Zoom in / Zoom out</b> — Adjusts your view of the Video Timeline.

e <sub>a</sub>	<b>Show tracking path</b> — Shows or hides the tracking path in the Preview Window.
₩ 😡	The eye on each tracker indicates its status. When enabled, an open eye appears and the tracker is visible in the Preview Window. When disabled, the closed eye appears and the selected tracker is hidden.
+ -	Add tracker / Remove tracker — Adds and removes trackers
I	Rename tracker — Renames the active tracker
<b>2</b>	Save to path library — Saves the active paths to the path library.
<b>*</b>   <b>□</b>   <b>⊕</b>	Set tracker as point / Set tracker as area /Set multi-point tracker— Lets you choose a single tracking point, a set tracking area, or a dynamic multi-point area.
**************************************	Apply/hide mosaic — Applies a mosaic effect over the tracked object. This button lets you blur the area of the tracked object. You can choose a rectangular or circular mosaic.
20 🗘 🗷	Adjust Mosaic size — Lets you set the size for the mosaic pattern
✓ Add matched object  Position: Custom ▼	Add matched object — Adds a matched object and lets you adjust the position from the Position drop-list or the Preview Window.
Cancel	<b>Cancel</b> — Closes the Track Motion dialog box and discards any changes made on the video.
ОК	<b>OK</b> — Closes the <b>Track Motion</b> dialog box and keeps the path tracked as a video attribute.

## To launch the Track Motion dialog box

- You can do one of the following:
  - Select a video file on the Video Track and click the **Track Motion** button on the **Toolbar**.
  - Click **Tools** > **Track Motion** and choose a video file.
  - Right-click a video clip on the Video Track of the Timeline and choose **Track Motion**.

### To track the motion of video objects

- 1 Click Tools > Track Motion.
- **2** Browse for the video that you want to use and click **Open**. This opens the **Track Motion** dialog box.

In this example, a video of a boy walking by the lake is selected.

Motion tracking 161



**3** Drag the tracker to the part of the video that you want to track. In the example, the tracker is dragged to the face of the boy. The area is magnified to give you a closer view of your selection.



- 4 In the **Tracker type** area, choose one of the following trackers:
  - Set tracker as point (default) lets you set a single tracking point.
  - Set tracker as area 📺 lets you set a fixed tracking area. This gives you a larger sample area but also lets you set the boundaries for a Mosaic blur. You can adjust the shape and size of the tracker by dragging the corner nodes.
  - ullet Set multi-point tracking  $\hbox{$\tiny\textcircled{\tiny\dag}$}$  lets you set a dynamic tracking area that adjusts in size and shape as the object moves closer or further from the camera or changes angles. Drag the four nodes to the inside edges of the area that you want to track. This type of tracker automatically applies a Mosaic blur. For more information see "To blur parts of tracked objects" on page 174.
- 5 Click the **Track Motion** button



The video is played as the tracking path is generated. If **Show tracking path** is selected, the tracking path is displayed and highlighted once the tracking process is completed.



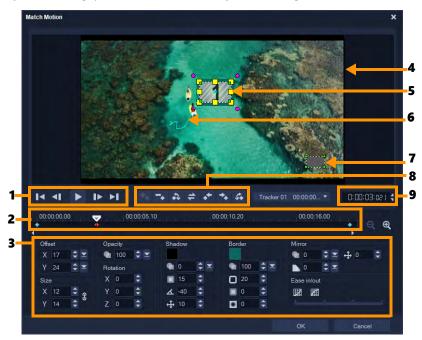
6 Click OK.



It is easier to track points or areas in your video that are distinctly in contrast with other video elements. Avoid choosing pixels that may blend with similar pixels in the video.

# Matching motion to a tracking path

Using the **Match Motion** feature, you can automatically match the motion of overlays and titles with a tracking path to create the effect of one element following another. For example, you can identify a moving person in a video by matching a title name to his tracking path.



Match Motion dialog box

Motion tracking 163

Part	Description
1 — Playback Control	Buttons that control video playback.
2 — Timeline Control	The Video Timeline along with zoom controls.
3 — Attribute Panel	Defines the Position, Size, Opacity, Rotation, Shadow, Border, Mirror and Ease in/out controls.
4 — Preview Window	Shows the current video being played.
5 — Matched object	Specifies where the matched object is placed, which can be a title or overlay. This is applicable only in <b>Match Motion</b> .
6 — Motion path	The path of the motion as manually defined. This is shown only in the <b>Customize Motion</b> dialog box.
7 — Object distortion window	Controls the orientation of the video clip / overlay object.
8 — Key frame Control	Adds, removes and controls the position / offset of key frames.
9 — Timecode	Lets you jump directly to a specific part of the video by specifying the exact timecode.

#### Match Motion / Customize Motion buttons and options

+•	Add keyframe — Adds a keyframe
-,	Remove keyframe — Removes a keyframe
<b>a</b>	Go to previous keyframe — Jumps to the previously available keyframe
=	Reverse keyframe — Reverses the current keyframe
*	Move keyframe to the left — Moves the current key frame one step to the left
+,	Move keyframe to the right — Moves the current key frame one step to the right
4	Go to next keyframe — Jumps to the next available keyframe
Tracker 01 00:00;00 ▼	Tracker menu — Lets you select the tracker that the matched object will follow. This is shown only in the <b>Match Motion</b> dialog box.
Reset	Reset — Discards all actions. This is shown only in the <b>Customize Motion</b> dialog box.
Save to	Save to — Saves the active paths to the path library. This is shown only in the <b>Customize Motion</b> dialog box.
Cancel	Cancel — Closes the <b>Customize Motion / Match Motion</b> dialog box and discards any changes made on the video.
ОК	OK — Closes the <b>Customize Motion / Match Motion</b> dialog box and saves the path tracked as a video clip attribute.



Match Motion / Customize Motion right-click menu

#### Match Motion / Customize Motion right-click menu

Add key frame	Adds a key frame
Remove key frame	Removes a key frame
Keep Aspect Ratio	Maintains the width to height ratio when you resize the video clip or overlay object.
Reset Distort	Reverts to the original aspect ratio after you distort the clip or object.
Show object distortion window	Displays/hides the object distortion window that controls the orientation of the video clip / overlay object.

Motion tracking 165

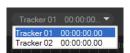
Show Grid Lines	Launches the <b>Grid Line Options</b> window that modifies the grid line settings.
Show background video	Displays/hides the other tracks in the <b>Timeline</b> .
Show result in preview window	Enables/disables simultaneous display of edits on the preview window.
Adjust view size (Mouse wheel)	Changes zoom settings to 100%, 50%, or 33%. Alternatively, you can zoom in or out using the mouse wheel.

#### To launch the Match Motion dialog box

 Right-click an overlay clip on the Timeline and choose Motion Options > Match Motion.

### To match motion to a tracking path

- 1 Insert a video with tracking path in the video track.
- 2 Insert a title clip in the overlay track and adjust its properties to match your project. In this example, the name of the boy in the video is added to the title track.
- **3** Right-click the title in the title track and select **Motion Options** > **Match Motion**. This opens the **Match Motion** dialog box.
- **4** If you have more than one tracker, select the tracker that you want to match. In the sample video, Tracker 01, which represents the tracking path of the boy, is selected.



**5** Adjust the properties of your title depending on the requirements of your project. Each time you set a value, a key frame is added.



In this example, **Offset** values are adjusted to set the ideal distance between the boy and the title. The **Size** and **Opacity** values are also adjusted to make sure that the title is visible and yet a bit transparent.

**Note:** If you need to turn and move the clip around the video, you can set the values under **Offset** and **Rotation**. You also have the option to add a shadow and border, or mirror your image. Clicking the **Ease in/Ease out** button allows the motion to start out slowly or slow down as it comes to an end. Drag the slider to control the timing.

**6** Play the video to test your animation. When done, click **OK**. The result of our sample project is shown below.





You can tweak the properties of your overlays and titles by using key frames, dragging the tracker and adjusting values in the **Match Motion** dialog box.

#### To unlink overlay clips from tracking paths

• Right-click the overlay clip and select **Motion** > **Remove Motion**.

## **Customizing motion**

Using the **Customize Motion** feature, you can manually set the motion of overlays and titles to complement the motion of elements in a background video (without reference to any existing tracking information). This means that you can define your own motion path and modify various properties to create simple or complex motion effects. For example, using keyframes, you can control the size, opacity, and rotation of an object as it moves across the path you set for it.

You can save a custom motion to the **Library** as a path, with or without other property settings.



Customize Motion dialog box

Motion tracking 167

Description
Buttons that control video playback.
The Video Timeline along with zoom controls.
Defines the Position, Size, Opacity, Rotation, Shadow, Border, Mirror and Ease in/out controls.
Shows the current video being played.
The path of the motion as manually defined. This is shown only in the <b>Customize Motion</b> dialog box.
Controls the orientation of the video clip / overlay object.
Adds, removes and controls the position / offset of key frames.
Lets you jump directly to a specific part of the video by specifying the exact timecode.

#### To launch the Customize Motion dialog box

• Right-click a video clip on the **Timeline** and choose **Motion** > **Customize Motion**.



You can also open the **Customize Motion** dialog box by clicking the **Effect** tab from the **Options Panel**, and then clicking the **Advanced Motion** option. This option is available only when a clip is selected on the **Overlay Track**.

### To customize a motion path

1 Right-click a background video or an overlay clip in the **Timeline** and select **Motion** > **Customize Motion**. The **Customize Motion** dialog box opens.
In this example, the title is shown with a straight line motion path.

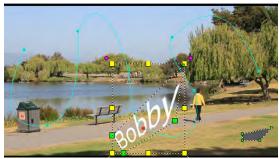


2 Change the shape of your motion path by dragging line segments and key frame nodes.



**Note:** Key frame nodes are automatically added every time you move to another frame and make a modification. You can also create a key frame node by dragging the scrubber and clicking the **Add key frame** button

3 Adjust the properties of your title depending on the requirements of your project. Each time you set a value, a key frame is added.
The example below shows the title after adjusting **Position**, **Size** and **Rotation** values. If you want to change the center reference for the object (to offset rotation or zoom effect), in the preview window, drag the red centre marker to a new position



**Note:** You also have the option to change the opacity, add a shadow and border, and mirror your image by adjusting the values under **Opacity**, **Shadow**, **Border**, and **Mirror**. Clicking the **Ease in/Ease out** button / allows the motion to start out slowly or slow down as it comes to an end. Drag the slider to control the easing in and out timing.

4 Play the video to test your animation. When done, click OK.



If an existing tracking path is customized, existing match motion information in the video will be converted to a generic moving path.

### To save a custom motion to the Path Library

- 1 After you create a custom motion in the **Customize Motion** dialog box, click **Save to**.
- 2 In the Save to Path Library dialog box, type a name in the Path name box.
- 3 Choose one of the following **Options**:
  - Path with all attributes saves the path and the attributes assigned to the keyframes
  - Path only saves the path only; no other attributes are saved
- 4 In the **Save to** drop-list, choose a folder.

Motion tracking 169

# To remove custom motion from a clip in the Timeline

1 In the **Timeline**, right-click a clip that has custom motion applied, and from the contextmenu choose **Motion** > **Remove Motion**.



Corel VideoStudio lets you track specific points or areas to create a moving path. This path represents the location of the selected point or area within the sequence of video frames.

Once you have tracking paths, you can choose to add matched objects around the tracker area or blur video elements using the tracker.

This section contains the following topics:

- · Adjusting tracking paths
- Using objects on tracking paths
- Using the Path Library

# Adjusting tracking paths

You can fine-tune or modify the behavior of a tracking path by manually resetting track points. For more information on creating tracking paths, see "Tracking motion of video objects" on page 159.

#### To adjust tracking paths

- 1 Select a video file on the Video Track and click the **Track Motion** button on the **Toolbar**.
- 2 From the list of trackers, select the tracker that you want to adjust.
- **3** Drag the **Scrubber** to locate the point where you want to adjust the path.
- **4** Drag the tracker to the new key frame position.
- 5 Click the **Track Motion** button to retrack the path. The tracker continues tracking using the new key frame position.



Adjusting the track points allows you to fine-tune or smoothen the movement of matched objects.

## To define the tracking path duration

1 Drag the **Scrubber** to the point where you want to start motion tracking. Click the **Track** in button ...

Tracking paths 171

2 Drag the **Scrubber** to the point where you want to end motion tracking. Click the **Track** out button .

The tracking path duration is defined.

#### To extend tracking path duration

- 1 Drag the **Scrubber** to the untracked area where you want to end motion tracking.



Dragging the **Scrubber** and clicking the **Track in II** button removes the current path and marks a new starting point.

#### To reset tracking paths

- You can reset the current tracking path and select a new area to track by doing any of the following:
  - Drag the tracker point to another location.
  - Drag the **Scrubber** to another location and click the **Track in** button **...**
  - Click the **Reset** button 40.

#### To show or hide trackers

Click 
 or 
 or low or hide trackers.

#### To add trackers

- 1 Click the **Add a new tracker** button **to** add the second tracker. A new tracker appears on the screen and a new tracker is added to the list.
- 2 Drag the tracker to the part of the video that you want to track.
  In our example, the second tracker is dragged to a stationary fishing ladder on the lake.
- 3 Click the **Track Motion** button ...
  - If **Show tracking path** is selected, the paths of both trackers are displayed and the selected tracker is highlighted.

In the example, Tracker 1 tracks the boy while Tracker 2 tracks the stationary fishing ladder on the lake. Since the camera is panning to the right, the result shows the path of Tracker 1 moving to the right and the path of Tracker 2 moving to the left.



#### 4 Click OK.



To remove a tracker, select a tracker and click the **Remove tracker** button **=**.

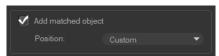
#### To rename trackers

- 1 Select a tracker and click the **Rename tracker** button **.**
- 2 Enter the new tracker name in the Rename Tracker dialog box.
- 3 Click OK.

# Using objects on tracking paths

### To add matched objects

On the Track Motion window, enable Add matched object.
 A matched object appears on the Preview Window.



- 2 Adjust the position of the matched object by doing one of the following:
  - Choose an option from the **Position** drop-list.
  - Drag the matched object marker to your preferred position in the Preview Window.
- 3 In the Preview Window, drag the corners of the matched object to adjust its size.



**4** Proceed with motion tracking as specified in previous procedures to generate the tracking path.

Tracking paths 173

#### 5 Click OK.

- The Track Motion dialog box closes and a placeholder is added to the Overlay track.
- 6 Browse for the media clip you want from the **Library** and drag it over the placeholder on the **Timeline**. While dragging over the placeholder, press **[Ctrl]** to snap the new media clip into the placeholder's location and replace the clip.



## To blur parts of tracked objects

1 In the **Track Motion** dialog box, click the **Apply Mosaic** button to enable the mosaic and then click the arrow beside the button to choose a **Rectangle** or **Circle** mosaic.

**Note:** If you used a multi-point tracker, the shape options are not available because the shape is dynamic and determined by the movement of the object.

The prospective blurred area will appear in the Preview Window as a grid.

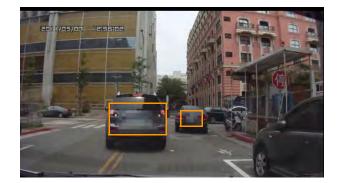
2 Adjust the size of the grid to cover parts that you want to blur by dragging the nodes at the corners of the grid and adjust the value in the **Adjust mosaic size** box.

**Note:** Options for matched object will be grayed-out when you enable this feature.



**3** Proceed with motion tracking as specified in previous procedures to generate the tracking path.

The area of the tracked object will have a mosaic-like effect when you view the video in the Preview Window of the main program.



#### 4 Click OK.



In combination with motion tracking, this feature is most useful in blurring out elements that you do not want to show in your video. Some examples of such are blurring out faces of people to protect their identity and covering vehicle license plates for security or obscuring company logos that are trademarked.

# **Using the Path Library**

You can add motion behavior to a clip in the main video track or in the overlay track by dragging a preset path from the Path Library to the clip in the **Timeline**.



## To save tracking paths in the Track Motion dialog box

- 1 Select a tracking path name and click the **Save to Path Library** button **.** The **Save to Path Library** dialog box opens.
- **2** Select the folder location for the path.
- 3 Click OK.



Select **Export all visible paths** to save all the visible tracking paths. All saved tracking paths will be converted to generic moving paths without the speed and time properties previously associated with it.

Tracking paths 175

#### To import paths to the Path Library

- 1 Click the **Import path** button **1**.
- 2 Browse for the path file and click **Open**.

### To export paths from the Path Library

- 1 Click the **Export path** button **E**. The **Export Path** dialog box opens.
- 2 Click the **Browse** button is to select the path file.
- **3** Enter a name for the path folder.
- 4 Click OK.



If you export a project using Smart Package, tracking information in the project is also exported and the corresponding path folder is automatically generated in the computer where the smart package is opened.

#### To reset the Path Library

• Click Settings > Library Manager > Reset Library.



Painting Creator is a feature of Corel VideoStudio that allows you to record painting, drawing, or writing strokes as an animation or still image that can be applied to your project as an overlay effect.

This section contains the following topics:

- · Working with Painter Creator
- Switching between Painting Creator modes
- Creating images and animations

# Working with Painter Creator

The **Painting Creator** window contains all the tools you need to record and save your animation or drawing. The table below lists the controls and features in the **Painting Creator** window.

## **Painting Creator interface basics**



Part	Description
1 — Brush Thickness	Defines the thickness of your brush tip through a pair of sliders and a preview box.
2 — Canvas / Preview Window	The painting area.
3 — Brush Panel	Choose from a wide array of paint media, brush/tool tips, and transparency.

Painting Creator 177

Part	Description
4 — Color Palette	Allows you to choose or specify color using the <b>Windows Color Picker</b> or <b>Corel Color Picker</b> . You can also pick color by clicking the eye dropper.
5 — Gallery	Contains thumbnails of the animations and stills that you have created.

## **Painting Creator control buttons and sliders**

Painting Creator Control buttons and sliders	
Real Control of the C	<b>New / Clear Button</b> — Launches a new Canvas / Preview Window.
<b>e e</b>	<b>Zoom In and Zoom Out buttons</b> — Allows you to zoom in and zoom out your view of the painting.
1:1	<b>Actual Size</b> — Reverts your canvas or Preview Window to its actual size.
<b></b>	<b>Background image button and slider</b> — Clicking on the <b>Background Image</b> button allows you to use images as reference for your painting and control its transparency through the slider.
$\bigcirc$	<b>Texture Option Button</b> — Allows you to choose and apply textures to your brush tips.
∕s Vs	<b>Eyedropper Tool</b> — Allows you to select a color from the color palette or surrounding objects.
<b>₽</b> <sub>B</sub>	<b>Eraser mode button</b> — Enables you to write or erase your painting / animation.
<b>5</b>	<b>Undo Button</b> — Lets you undo and redo actions in Still and Animation modes.
Č	<b>Redo button</b> — Lets you undo and redo actions in Still and Animation modes.
Start recording  Stop recording  Snapshot	<b>Start recording / Snapshot button</b> — Records your painting session or adds your painting to the <b>Gallery</b> . The <b>Snapshot</b> button only appears if in Still mode.
	<b>Play / Stop button</b> — Plays or stops the current painting animation. Enabled only in Animation mode.
Ř	<b>Delete button</b> — Deletes an animation or image from the library.
Ġ	<b>Change duration button</b> — Changes the duration of the selected clip.
	<b>Preference setting button</b> — Launches the Preferences dialog box.

	<b>Change to Animation or Still mode button</b> — Allows you to switch between Animation mode and Still mode.
ок	<b>OK button</b> — Closes <b>Painting Creator</b> and inserts the animations *.uvp format and images in the *.png format in the Corel VideoStudio <b>Library</b> .
Close	Close button — Closes the Painting Creator window.

#### To launch Painting Creator

• Click Tools > Painting Creator.

#### To import animations and images into the Library

 In the Painting Creator window, choose the thumbnails you want in the Gallery and click OK.

Corel VideoStudio automatically adds your animations and stills to the Library in the currently selected folder. Animations are saved to the \*.uvp format and images are saved as \*.png files.

# Switching between Painting Creator modes

There are two Painting Creator modes to choose from: **Animation mode** and **Still mode**.

## To choose between Painting Creator modes

- Click one of the following buttons:
  - **Animation mode** lets you record entire painting sessions and embed your output in the **Timeline**.

Note: By default, Painting Creator will launch in Animation mode.

### To change a default clip duration

1 Click the **Preference setting** button The **Preferences** dialog box appears.

2 In the General tab, increase or decrease the Default macro duration.

Note: Click OK.

Painting Creator 179

## Creating images and animations

You can record animations or save still images in the **Painting Creator** window. You can play your animations and convert them to still images. To get different types of brushstrokes, you can adjust your brush settings. You can also use a reference image as you draw.

#### To record a painting animation

- Click Start recording.
- 2 Using the different sets of brushes and colors, paint your still image on the canvas or Preview Window and click **Stop recording** when finished.

**Note:** Your painting animation will automatically be saved in the **Gallery**.

#### To paint a still image

 Using the different sets of brushes and colors, paint your still image on the canvas or Preview Window and click **Snapshot** when finished.

**Note:** Your painting will automatically be saved in the **Gallery**.

#### To play your painting animations

Click an animation thumbnail in the Gallery and click the Play button ...



## To convert your animation to a still image

 In the Gallery, right-click your animation thumbnail and select Transfer animation item to still.

**Note:** You can use the still image as an intro or end clip of your animation.

#### To specify your brush settings

- 1 Click on the **Settings** button <del>\$\infty\$</del>.
- 2 Modify the brush properties to achieve your desired brush stroke effect. **Note:** Options vary for each painting tool.
- 3 Click OK.

#### To use a reference image

 Click the Background Image Option button sand the Background Image Option dialog box appears. Set the following options:

- Refer to the default background color allows you to select a solid background color for your painting or animation.
- **Current timeline image** uses the video frame currently being displayed on the Timeline.
- **Customize image** allows you to open an image and use it as the background for your painting or animation.

Painting Creator 181



Corel offers a fast and easy way to create your own movie. You can quickly put together an impressive project with Corel® FastFlick. Just pick a template, add your media clips, and save your movie.

This section contains the following topics:

- · Creating a FastFlick project
- Selecting a template (FastFlick)
- Adding media clips (FastFlick)
- Editing titles (FastFlick)
- Adding music (FastFlick)
- Applying Pan & Zoom effects (FastFlick)
- Setting movie duration (FastFlick)
- Saving to video files for computer playback (FastFlick)
- Uploading to the Web (FastFlick)

# Creating a FastFlick project

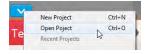
When you launch FastFlick, you can immediately start a new project or open an existing project for further editing.

## To create a FastFlick project

From the VideoStudio window, click Tools > FastFlick.
 The FastFlick window appears.

#### To open an existing FastFlick project

• In FastFlick, click the **Menu** arrow > **Open Project**.



# Selecting a template (FastFlick)

FastFlick comes with a number of templates that feature different themes.

FastFlick 183

#### To select a template

- 1 Click the **Select Your Template** tab.
- 2 Select a theme from the drop-list. You can choose to display all themes or select a specific theme from the list.
- **3** Click a template from the thumbnail list.
- **4** To preview the template, click the **Play** button **.**



An orange box marks the selected template. The template thumbnail is also displayed on the **Your Template** tab when you open the other tabs.

If you have VideoStudio X9 or later, you can create your own FastFlick templates.

# Adding media clips (FastFlick)

You can use photos, video clips, or a combination of media clips when creating your movie.

#### To add media clips

- 1 Click the **Add Your Media** tab.
- 2 Click the Add Media button ①. The Add Media dialog box opens.
- 3 Select the media files you want to add and click **Open**.



You can also add media by dragging photo and video files from a Windows Explorer folder to the FastFlick window.

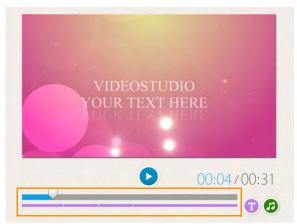
## **Editing titles (FastFlick)**

FastFlick templates have built-in title clips. You can replace the placeholder text with your own text, change the font style and color, and even add effects such as shadow and transparency.

#### To edit a title

1 On the **Add Your Media** tab, drag the **Scrubber** to the part of the movie clip marked with a purple bar.

This activates the **Edit Title** button **1**0.



- 2 Click the Edit Title button or double-click the title on the Preview Window.
- 3 To change the font style, select a font from the **Font** drop-list.
- **4** To change the font color, click the **Color** button and click a color swatch. You can also launch the **Corel Color Picker** or the **Windows Color Picker** by clicking the option from the list.
- **5** To add a shadow, enable the **Shadow** check box.
- **6** To change the shadow color, click the **Color** button below the check box and click a color swatch or launch a Color Picker.
- **7** To adjust transparency, click the **Transparency** down arrow and drag the slider. You can also click inside the **Transparency** box and type a new value.
- **8** To move the title, drag the text box to its new position on the screen.
- **9** To finish editing a title, click outside the text box.



Corel VideoStudio offers extended title editing capabilities. To edit titles in Corel VideoStudio after you finish your project in FastFlick, click the **Save and Share** tab and click **Edit in VideoStudio**.

## Adding music (FastFlick)

Most of the templates have built-in music that you can keep or replace. You can add your own music, delete music, and change the order of the audio files. You can also apply Audio Normalization to automatically adjust the volume of each music clip to the same level.

## To add a background music

- 1 On the Add Your Media tab, click the Edit Music button @.
- 2 Under Music Options, click Add Music. The Add Music dialog box opens.

FastFlick 185

3 Select your audio files and click **Open**.

#### To rearrange audio clips

- 1 On the Add Your Media tab, click the Edit Music button.
- 2 Click an audio file in the Music Options list.
- 3 Click the **Move up** button ▲ or the **Move down** button ▼ to change the audio file order.

#### To delete an audio file

- 1 On the Add Your Media tab, click the Edit Music button .
- 2 Click an audio file title and click the **Delete** button **x**.

#### To apply Audio Normalization

- 1 On the Add Your Media tab, click the Edit Music button .
- **2** Enable the **Audio Normalization** check box to adjust the volume of each music clip to the same level.

# Applying Pan & Zoom effects (FastFlick)

Make your movie or slideshow more interesting by adding pan and zoom effects to your photos. FastFlick does the work for you by applying the effect to all the photos in your project.

### To apply Pan & Zoom effects to photos

- 1 On the Add Your Media tab, click the Options button \*...
- 2 Under Photo Pan & Zoom Options, enable the Smart Pan & Zoom check box.

# Setting movie duration (FastFlick)

You can determine the relationship between the duration of your project and the music.

#### To set movie duration

- 1 On the Add Your Media tab, click the Options button \*
- 2 Under **Movie Duration**, choose one of the following options:

- Fit music to movie duration automatically adjusts the music clip to play until the movie ends.
- **Fit movie to music duration** automatically adjusts the movie clip to play until the music track ends.

## Saving to video files for computer playback (FastFlick)

FastFlick lets you save your movie project to video file formats that you can playback on computers.

### To create a video file for computer playback

- 1 On the **Save and Share** tab, click the **Computer** button .
- **2** Click one of the following buttons to view and choose the profile for your video:
  - AVI
  - MPEG-2
  - AVC/H.264
  - MPEG-4
  - WMV
- 3 In the **Profile** drop-list, choose an option.
- 4 In the File name box, type a file name.
- 5 In the File location box, specify the location where you want to save the file.
- 6 Click Save Movie.

# Uploading to the Web (FastFlick)

Share your movie online by uploading your videos to YouTube, and Flickr, or Vimeo. You can access your accounts from within FastFlick. If you don't have an existing account, you will be prompted to create an account.

The first time you log in from FastFlick, you are asked to authorize the connection between your online account and FastFlick. This authorization allows for the exchange of limited information related to the successful upload of your video.

As with any video upload, the online site usually requires time to post the video after it has been uploaded.



Please make sure to abide by the terms of use regarding copyright ownership of video and music as set by YouTube, Flickr, and Vimeo.

FastFlick 187

### To upload your video to YouTube, Flickr, or Vimeo

- 2 Click one of the following buttons:
  - YouTube
  - Flickr
  - Vimeo

If you need to sign in, the **Log In** button appears. Click the button to sign in. If it is the first time you are signing in, you will be asked to authorize the connection between Corel VideoStudio and your online account.

- **3** Fill in the necessary information such as your video title, description, privacy settings and additional tags.
- 4 In the **Quality** drop-list, select your preferred video quality.
- 5 In the File name box, type a file name.
- 6 In the File location box, specify the location where you want to save a copy of file.
- 7 Click **Upload Your Movie**.

# Editing your movie in VideoStudio (FastFlick)

FastFlick is designed to help you complete a movie in three easy steps. However, you always have the option to edit your project further in VideoStudio.

#### To edit a movie in VideoStudio

• On the **Save and Share** tab, click **Edit in VideoStudio**.

The project files are automatically placed on the Timeline.



After your FastFlick project is imported into VideoStudio, you can continue editing your movie just like any VideoStudio project.

For more information, see "Timeline" on page 65.



You can create FastFlick templates in VideoStudio 2019. Unlike Instant Project templates, which are essentially previously saved static projects, FastFlick templates are designed to automatically expand or contract according to the number of photos and videos that a user drops into the template. This means a system of rules is required to control what to change, what to keep, and what to repeat. FastFlick templates are very easy to use, but creating them requires knowledge and planning.

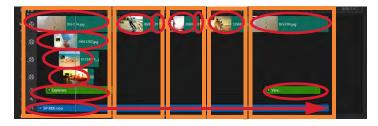
This section contains the following topics:

- Terminology for FastFlick templates
- Rules for creating FastFlick templates
- Creating FastFlick templates

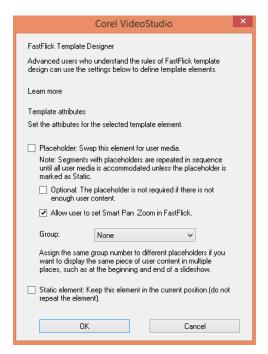
## Terminology for FastFlick templates

The following terminology is used when creating and describing FastFlick templates.

- **Segment** each image or video clip added to the main track creates a segment (this includes images or videos from the Graphic Library, such as backgrounds or objects). You can enhance your segment by adding elements such as overlays, titles, and transitions. You can also apply effects to elements in your segment. It's important to think of a segment as an independent block. This is achieved by ensuring that elements within the segment do not extend beyond the duration of the segment's image or video in the main track (the Music track is the only exception).
- **Element** an element can be a transition, title, object, or any piece of media. It is a way of describing the individual pieces used to build a template segment.
- **Attributes** the properties that you assign to template elements that determine their behavior.
- **Placeholder** an attribute that is assigned to temporary media that will be swapped out for user media. Placeholders are repeatable by default (to accommodate the unspecified number of media that a user can add to a template).
  - **Optional** is an attribute you can assign to a placeholder if you feel that the element is not required if there is not enough user content. For example, you can apply Optional to a placeholder in the main video track if the segment can be dropped when user content runs out (rather than repeat user content to complete the sequence).
- **Static** an attribute assigned to a template element that you want to keep in the current position. When the media in the main video track is marked as static, the segment won't repeat in the sequence—it will display only in the current position (for example, in a beginning or end segment).



Each image or video clip added to the main video track creates a segment (indicated by the orange boxes). Each segment can have multiple elements (indicated by the red ovals).



The FastFlick Template Designer dialog box lets you assign attributes to the elements in your template. To open the dialog box, right-click a template element in the Timeline and choose FastFlick Template Designer.

# Rules for creating FastFlick templates

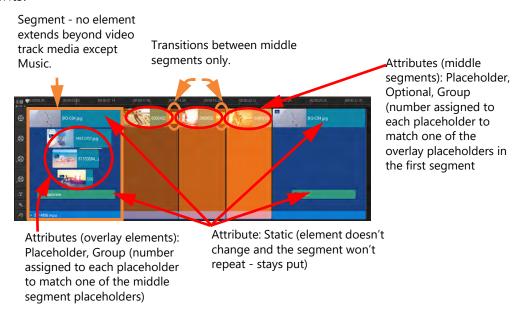
For FastFlick templates to work correctly, you must follow some rules. Because you create the templates in the same workspace that you use for all projects, it's easy to break the rules without realizing it. It's best to review the rules before you save your template and always test your saved template in FastFlick before you share it.

#### Rules

- 1 **Segments:** Ensure that the elements in a segment do not cross between segments.
- 2 Placeholders: You must have at least one placeholder in your template.

- **3 Audio:** Use only Music Track #1 for template audio. Audio files are the only elements that can extend beyond a single segment (for example, you can have one song that extends the entire length of your template project).
- 4 Titles: Use only Title Track #1 for titles
- **5 Transitions:** Use transitions only at the end of segments that are not the first or last segment in your template. Although technically transitions bridge segments, think of a transition as belonging to the media that comes before it.
- **6 Group:** If you want user media to appear in more than one position, you must assign a matching **Group** number to the placeholders. For example, the same piece of user media can be used in an intro overlay and in the main part of a slideshow if you assign the same **Group** number attribute to the corresponding placeholders.

The rules above are basic rules that will get you started—there are some exceptions. For inspiration and to gain a better understanding of what different attribute settings can do, open existing FastFlick templates in VideoStudio and review the attribute settings for the elements.



The project above has five segments. Blue areas indicate the first and last segment and orange areas indicate the three middle segments. The attributes chosen for this project ensure that the blue areas appear only once (beginning segment and end segment) and the orange segments will repeat in sequence until all the user media is accommodated. User media that appears in the small intro overlays will also appear as part of the main slideshow.

## **Creating FastFlick templates**

You can approach FastFlick template creation in different ways: you can modify an existing FastFlick template, convert an existing project to a template, use Instant Project components, or build a template from scratch. For your first project, it is recommended that you build a

template from scratch because it is a good way to learn the template rules. Reviewing existing FastFlick templates is a good way to get inspiration.

In general, FastFlick templates will have a beginning, a middle, and an end. Although technically you can have only one segment in your template, it takes several segments to define a look and feel for a template.

Here are some things to think about when creating your template:

- What are the anchor elements (things that stay the same)? For example, do you have a beginning segment and end segment? If so, what elements within those segments stay the same? Will these segments include static placeholders (user content that does not repeat)?
- How many segments do you want to create? Keep in mind that segments with placeholders repeat in sequence until all the user media is accommodated (unless marked as Static)
- Which segments are optional (can be dropped when the user content is done)?

#### To create a template

- 1 In the VideoStudio **Edit** workspace, build your template, following the FastFlick template rules. Ensure that the elements for each segment do not overlap (with the exception of audio clips on the Music 1 track).
- 2 Right-click an element and choose FastFlick Template Designer.
- 3 In the **FastFlick Template Designer** dialog box, choose the attributes that you want to apply to the element.
- **4** Repeat steps 3-4 for each element.
- 5 Click File > Save, and type a file name.
- 6 Click File > Export as Template > FastFlick Template. Verify the Template path and Template folder name.
  - If you want the folder name to be different from your file name, type a new name in the **Template folder name** box.
- 7 In the **Category** list, choose a group for your template.
- 8 Click OK.



If you include video clip placeholders in your template, the length of the user video clip will be constrained to the length of the corresponding placeholder clip if an effect filter is applied to the placeholder clip.



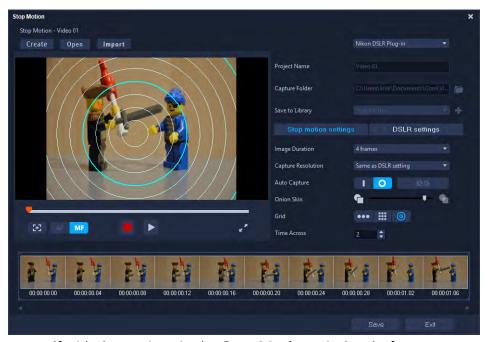
The Stop Motion function of the VideoStudio lets you create animated films by capturing still images grabbed from a live source, such as a video camera, webcam, or DSLR. The result is a collection of sequential images, and a project file that you can use to create your stop motion movie.

This section contains the following topics:

- How to create a stop motion project
- Stop motion settings
- Opening and importing files for stop motion
- Using the DSLR Enlarge Mode

## How to create a stop motion project

The steps below guide you through a basic workflow for a stop motion project. Before you start, it's best to have all your materials ready and have your shooting area set up with the lighting you need. If you are using a DSLR that is supported in VideoStudio, set your camera to Manual mode. A tripod is recommended.



Familiarize yourself with the settings in the **Stop Motion** window before you start. For more, see "Stop motion settings" on page 194.

#### To create a stop motion project

- 1 If using an external camera to capture your stop motion project, ensure that the camera is plugged into your computer and is on, ready to capture photos. Set the camera to manual mode.
- 2 In VideoStudio, open the **Stop Motion** window by doing one of the following:
  - In the **Edit** workspace, click the **Record/Capture** button on the Timeline toolbar, and click the **Stop Motion** button
  - In the **Capture** workspace, click **Stop Motion**.
- 3 Click the **Create** button, and from the drop-list in the upper-right corner of the window, choose the camera you want to use as your capture device (displays supported cameras that are connected to the computer and switched on).
- **4** Do one of the following:
  - On your camera, manually choose the best settings for your stop motion scene and adjust the focus (can set the lens to MF to focus manually).
  - If you have a compatible camera (many Canon and Nikon DSLRs are supported), click the **DSLR settings** tab and choose the settings for your camera. You can then focus the camera manually or set the lens to AF mode, and in VideoStudio, enable **Show Focus** to display the onscreen controls. Click **Auto Focus** or **Manual Focus**. For **Auto Focus**, drag the rectangle to the area of focus. The camera will automatically adjust the focus.
- 5 Type your **Project Name**, and choose a **Capture Folder** and a **Save to Library** location.
- **6** When you know what kind of motion you want to make, click the **Stop motion settings** tab, and choose the settings you want.
- 7 When you have the subject set up, click the **Capture Image** button. If you are using **Auto Capture**, this will initiate the capture intervals you set.
- **8** Move your subject the way you want, and continue capturing an image for each movement. Each capture displays in the thumbnail tray at the bottom of the window.
- **9** When you are ready to review the frames, click the **Play** button below the preview to review the movie. In the thumbnail tray, select any of the thumbnails and right-click to copy or delete a thumbnail.
- **10** When you are finished, click the **Save** button at the bottom of the window to return to the main application window.

### Stop motion settings

The following settings are available in the **Stop Motion** window:

- Image Duration Lets you choose the exposure time for each image. A higher frame rate results in a shorter exposure time for each image.
- Capture Resolution Lets you adjust the screen capture quality. Options vary according to the settings on your capture device.

- Auto Capture You can click **Enable auto capture** to configure the program to capture automatically using preset intervals. Click the **Set Time** button to adjust the **Capture Frequency** and **Total Capture Duration** settings.
- Onion Skin Lets you move the slider from left to right to control the opacity of the new captured image and the previously captured frame.
- **Grid** ••• **III** ••• Lets you display an overlay that helps you gauge movement. The interval (spacing) for the grid types is determined by the **Time Across** setting. The value (seconds) determines how many suggested captures to make, as indicated by the space between intervals. Select any of the three types of placement tools in the **Grid** area:
  - **Line**: Drag across the screen to set a line with nodes that mark intervals. Look for the pink node to find the suggested alignment for your next capture.
  - Grid: Click the preview area to display a grid overlay onscreen
  - **Circles**: Click the preview area to place the center point. A circle pattern displays onscreen.

# Opening and importing files for stop motion

You can open a stop motion project that you saved previously. You can also import images that you have captured in advance. For example, a series of photos shot with your DSLR on auto/continuous mode is a good source for stop motion animation projects.

#### To open an existing stop motion animation project

- 1 Click Open and browse for the stop motion animation project that you want to work on. Note: Stop motion animation projects created in Corel VideoStudio are saved in the .uisx format.
- **2** Click **Open** to activate the project.

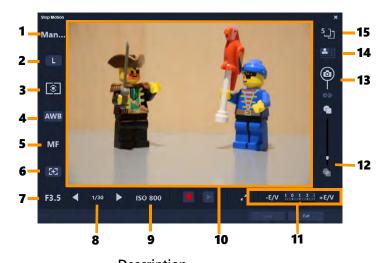
#### To import images into a stop motion animation project

- 1 Click **Import** and browse for the photos that you want to include in your stop motion animation projects.
  - Note: If photos do not appear in the folder, click Browse.
- 2 Click Open.

Your photos are automatically included in the stop motion animation project.

## Using the DSLR Enlarge Mode

Corel VideoStudio mimics the camera viewfinder and gives you quick access to DSLR features and settings.



Description
Displays information on the selected camera mode.
Lets you set the image size and quality.
Lets you set the metering mode by selecting from your camera's preset options.
Lets you set the white balance by selecting from your camera's preset options.
Displays information on the selected focus setting.
Displays live view focus guides on the screen.
Displays the aperture settings of the camera. This will be disabled when the DSLR is in P or Tv mode.
Displays the shutter speed settings of the camera. This will be disabled when the DSLR is in P or Av mode.
Lets you adjust the ISO setting by selecting from your camera's preset options.
Lets you adjust the focus area by clicking on the arrows or dragging the focus area box.
Lets you choose the exposure value compensation setting.
Lets you control the opacity of the new captured image and the previously captured frame by moving the slider.
Enables the auto capture feature.
Lets you set the image resolution. You can choose from the preset options or use the settings on your DSLR.
Lets you set the exposure time for each image.

# To activate DSLR Enlarge Mode

1 In the Stop Motion window, click the DSLR Enlarge Mode button





The **Multi-Camera Editor** lets you create professional-looking video compilations from footage of events that have been captured on different cameras, from different angles.

The easy multi-view workspace lets you synchronize the clips and edit on the fly, as the video clips play back simultaneously—up to \*six cameras. With a simple click, you can switch from one video clip to another in the same way a broadcast studio switches from one camera to another to capture a different angle or element of a scene.

Footage can be captured on a wide range of video recording devices, such as action cameras, drone cameras, DSLRs, or smartphones. You can also include audio captured independently on a microphone.

\*Number of cameras depends on the version of the software you have.

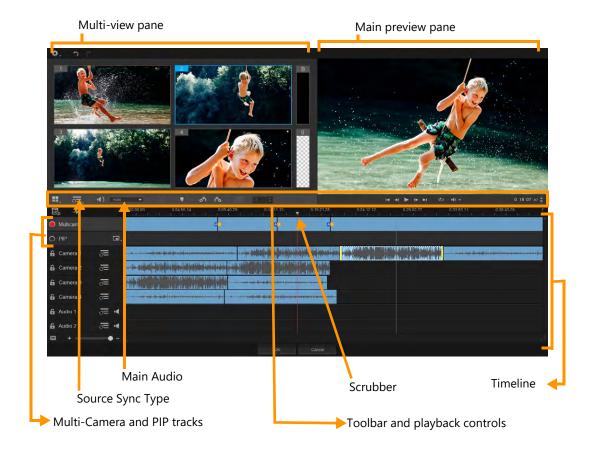
This section contains the following topics:

- The Multi-Camera Editor workspace
- Basic steps in multi-camera editing
- Importing video and audio clips into the Multi-Camera Editor
- · Synchronizing video and audio clips in multi-camera projects
- Choosing an audio source for your multi-camera project
- Editing multiple clips to create a multi-camera compilation
- Adding picture-in-picture (PIP) in the Multi-Camera Editor
- Managing multi-camera source files
- Saving and exporting your multi-camera project
- Using Smart Proxy with the Multi-Camera Editor

# The Multi-Camera Editor workspace

The image below identifies the main features of the Multi-Camera Editor.

Multi-Camera editing 197



### Toolbar, playback, and other controls

The controls found in the workspace are listed below.

The main toolbar includes the following controls:

**Camera Number** — Lets you set the multi-view pane to show four or six cameras, depending on your version of the software.

Source Sync Type — Lets you synchronize the clips. For more information, see "Synchronizing video and audio clips in multi-camera projects" on page 200.

• Camera 2 ■ Main Audio — Lets you select a preferred audio source. For more information, see "Choosing an audio source for your multi-camera project" on page 201.

Split Clip — Lets you split a clip into segments. For more information, see "To split a clip in the Multi-Camera Editor" on page 204.

Set/Remove Marker — Lets you add markers on the Camera tracks for editing purposes, such as audio syncing.

Transition and Duration — Lets you apply a transition between clips in the Multi-Camera track and set the duration for the transition. For more information, see "To add a transition between multi-camera segments" on page 204.

The main preview pane includes the following controls:

Rotate Left and Rotate Right — Let you rotate clips in the Camera tracks before you add them to your Multi-Camera track or your PIP track. Note: Only unlocked tracks can be rotated.

Playback bar with **Home**, **Previous Frame**, **Play**, **Next Frame**, and **End** buttons.

**Loop** — Lets you play the selected track continuously by looping back to the start when it reaches the end.

Set Volume — Lets you adjust the audio volume for playback.

Timecode control — Lets you view and set the time/frame that appears in the main preview pane and where the scrubber is set in the timeline. Click the arrows or a click number value to set a time/frame.

The timeline includes the following controls:

**Source Manager** — Lets you add and remove clips. For more information, see "Managing multi-camera source files" on page 205.

Show/Hide Audio Waveform View — Lets you view the audio waves for Camera and Audio tracks.

**Cock/Unlock** — Appears on individual tracks. Locking tracks is recommended after you synchronize them.

Include/Exclude from Synchronization — Lets you determine which tracks are included in the synchronization process.

Mute/Unmute — Lets you turn the audio off (mute) or on (unmute) for the selected audio track.

**Zoom to Timeline** — Located in the lower left corner of the timeline, this control lets you expand or compress your project so you can view the whole project in the timeline.

**Zoom Level** slider — Drag the slider or click the **Zoom in** (plus sign) or **Zoom out** (minus sign) to change the zoom level for your project. This is particularly helpful when editing individual segments in the **Multi-Camera** track.

The following general controls appear in the upper-left corner of the application window:

**Settings** — Lets you access the Proxy Manager and Save As. For more information, see "Using Smart Proxy with the Multi-Camera Editor" on page 206 and "To save your multi-camera project" on page 206.

Multi-Camera editing 199

☐ Undo and Redo — Lets you undo or redo most actions in the Multi-Camera Editor.

## Basic steps in multi-camera editing

The following steps provide a basic overview of the multi-camera editing process.

- 1 Import the video and audio clips that you want to use into the VideoStudio Library. Typically these are multiple clips that capture the same event, at the same time.
- 2 Choose the clips in the Library and import them into the **Multi-Camera Editor**.
- **3 Synchronize** the clips across the timeline. You can do this automatically if all the clips have audio, but there are a range of methods you can use for synchronization.
- **4** Choose the audio you want to keep (if you are using the original audio). You can choose a separate audio track as well.
- 5 Start building your multi-camera compilation. You can play all the clips simultaneously, and in the multi-view pane, click the "Camera" that you want to show. You can switch clips as many times as you like. The selected footage displays in the main preview pane. You can then review your project in the **Multi-Camera** track and fine-tune it.
- 6 Save and exit the Multi-Camera Editor to return to VideoStudio and output the project. Important! It's recommended that you finish your multi-camera editing before you exit the Multi-Camera Editor. Changes that you make to your project in another editor might not be supported if you re-open the project in the Multi-Camera Editor. This means that some changes will be reverted.

# Importing video and audio clips into the Multi-Camera Editor

The first step in creating a multi-camera project is to import your clips into the **Multi-Camera Editor**. In most cases, this will be a selection of clips from the same event that have been imported to the VideoStudio Library.

You can work with up to six video clips at one time and include up to two independent audio clips.

## To import video clips into the Multi-Camera Editor

- 1 In the VideoStudio Library, select all the clips you want to use.
- **2** Do one of the following:
  - On the timeline toolbar, click the **Multi-Camera Editor** button .
  - Right-click a selected clip and choose **Multi-Camera Editor**.

## Synchronizing video and audio clips in multi-camera projects

You can synchronize your video and audio clips so that they are all aligned to the same moment in time. The easiest way to do this is to let the **Multi-Camera Editor** analyze the

audio for each of the clips and sync the clips automatically. If your recordings are planned, you can use a special audio signal, such as clapping your hands (similar function to using a clapper board in professional shoots). Some events have natural audio cues that help the sync process, such as music performances or sporting events with a start signal.

You can also synchronize the clips by using markers, shooting time, or you can adjust them manually by dragging the clips in the timeline to the timecode you want. For example, you could use a common visual element, such as a flash to sync videos manually. These methods are helpful if your video footage doesn't include audio or the audio waveforms within the clips are difficult to sync, or you simply prefer to align the clips manually.

In some cases you might need to use a combination of the synchronization options, depending on your source footage.

#### To synchronize video and audio clips in the Multi-Camera Editor

- 1 After importing your clips to the **Multi-Camera Editor**, choose one of the following options from the **Source Sync Type** drop-list on the toolbar:
  - Audio Click the Sync button next to the drop-list to synchronize the clips in the timeline. Note: Your video clips must include audio to use this option.
  - Marker Select a clip in the timeline, play the clip or scrub to the position you want by using a visual cue, and click the **Set/Remove Marker** button on the toolbar to add a marker. After a marker has been added to each clip, click the **Sync** button on the toolbar to align the clips according to the markers.
  - Shooting Date/Time Click the Sync button to synchronize the clips according the shooting date and time as indicated by the metadata recorded by the camera. Note: The clocks must be in sync on the cameras to get accurate results.
  - **Manual** In the timeline, drag each clip to the position you want by using a visual cue.

**Note:** If there are clips that you want to exclude from the synchronization process, click the **Exclude from Synchronization** button on the corresponding track. Click the button again (**Enable for Synchronization**) to include the track.

**Tip:** After you synchronize your clips, you can use the **Lock** buttons on the individual tracks to ensure that the tracks stay synchronized during the editing process.

## Choosing an audio source for your multi-camera project

After you import and synchronize your clips in the **Multi-Camera Editor**, you can make some decisions about the audio for your project. For example, if you have four video clips, and they

Multi-Camera editing 201

all include audio, it is recommended that you listen to each clip individually, and choose the one that has the best sound quality. You can also choose to use a separate audio clip.

Other options let you use the audio from all clips, none of the clips, or switch audio (Auto) when you switch cameras, a choice you might make to take advantage of the audio captured with sport or other action footage.

By default, the audio for **Camera 1** is selected.

#### To choose an audio source for your multi-camera project

- 1 With your clips displaying in the **Multi-Camera Editor** timeline, on the toolbar, click the **Main Audio** box and choose a **Camera** or **Audio** clip. Click **Play** to listen the quality of the audio for each clip.
- 2 Choose the **Camera** or **Audio** clip that you want to use for your project. The audio from all other tracks will be muted.

Other options include:

- Auto Switches the audio to match the clip that you are playing
- None No audio is included in the multi-camera project. You can add your audio in VideoStudio, after you leave the Multi-Camera Editor.
- All Cameras Plays audio from all clips, simultaneously

**Tip:** If you plan to edit the audio after you exit the **Multi-Camera Editor**, please note that the setting you choose in **Main Audio** determines what tracks will be available as audio tracks in VideoStudio.

## Editing multiple clips to create a multi-camera compilation

After you import and synchronize your clips in the **Multi-Camera Editor**, and choose your audio settings, you can start editing your clips to create a multi-camera compilation. The multi-view pane in the **Multi-Camera Editor** helps make this task fun and easy. Much like a DJ switches and blends tracks to create a new music compilation, the **Multi-Camera Editor** lets you visually switch between video tracks and blend them together with transitions.

If you notice that playback is slow or lacks smoothness, you can check the **Smart Proxy** settings. For more information, see "Using Smart Proxy with the Multi-Camera Editor" on page 206.

After you build your basic compilation using the multi-view pane and the main preview pane, you can fine-tune your project in the **Multi-Camera** track and take advantage of editing features, such as transitions and a clip splitting tool. Note that some types of edits, such as rotating a clip, must be done in the individual **Camera** tracks before you add the clips to your compilation in the **Multi-Camera** track.

### To create a multi-camera compilation

- 1 With your clips in the **Multi-Camera Editor** timeline, click the **Play** button below the main preview pane.
  - Footage from all cameras can be viewed simultaneously in the multi-view pane.
- **2** To start building your project, as the videos play in the multi-view pane, click the preview for the camera that you want to show.
  - The footage from the selected camera displays in the main preview pane.



The multi-view pane appears to the left of the main preview pane. Footage from all cameras can be viewed simultaneously in the multi-view pane.

3 To switch cameras, click a different camera preview in the multi-view pane. You can switch cameras as many times as you like. You can review your project in the **Multi-Camera** track.



The Multi-Camera track in the timeline displays the camera segments in your compilation.

If you want to adjust the zoom level for the **Multi-Camera** track, drag the zoom level slider **\*\*** in the lower left corner of the timeline.

**4** After you have completed a first pass using the multi-view pane, you can refine the timing for a switch in the **Multi-Camera track** by playing your project or scrubbing to the position that you want to edit, clicking a camera segment and dragging the edge until the frame where you want the switch to occur appears in the main preview pane.

Multi-Camera editing 203



To switch a segment in the **Multi-Camera** track to a different **Camera**, right-click the segment and choose a different **Camera** from the context menu or click the camera preview in the multi-view pane.

#### To add a transition between multi-camera segments

- 1 In the Multi-Camera track, click a segment.
- 2 On the toolbar, click the **Transition** button The button has a yellow outline when active and a transition icon ("AB") appears in the timeline If the button is grayed out, gently drag the edge of a segment by a small amount to reactivate the button.
  - A Crossfade transition is applied by default.
- **3** On the toolbar, type a time in the **Duration** box for the transition.

**Tip:** You can add black or blank segments to your project. You can change a segment that is already in the **Multi-Camera** track to a black or a blank by right-clicking the segment and choosing **Black** or **Blank**. You can apply a transition between a video segment and a **Black** segment. To add a black or blank segment while playing your project, instead of clicking a camera preview in the multi-view pane, click the **Black** (**B**) or **Blank** (**0**) swatch to the right of the camera previews.



## To split a clip in the Multi-Camera Editor

- 1 In the timeline, select a clip in the **Multi-Camera** or **PIP** track and click **Play** or drag the scrubber to the position where you want to make the cut.
- 2 Click the **Split Clip** button.

**Note:** Splitting a clip is useful when you want to replace part of a segment with a different camera, essentially adding another switch.

## Adding picture-in-picture (PIP) in the Multi-Camera Editor

You can add a picture-in-picture (PIP) effect to your multi-camera project. PIP lets you play a video in one area of the screen while the main video plays in the background.



The image above illustrates the concept of picture-in-picture (PIP).

#### To add a picture-in-picture (PIP) effect to your multi-camera project

- 1 After you create your multi-camera compilation in the **Multi-Camera** track, click the **Play** button or scrub to the position in the **Multi-Camera** track where you want to add a PIP effect.
- 2 In the timeline, click the circle on the **PIP** track to activate the track. The circle will have a red fill when active PIP.
- 3 In the multi-view pane, click the preview for the **Camera** you want to use. The segment is added to the **PIP** track.
- **4** To set the end point for the segment, in the **PIP** track, click the end of the segment and drag it to the position you want in the timeline.
- 5 To choose a corner for the PIP, click the **Change PIP Position** button on the **PIP** track and choose the position you want.

  The PIP position can be seen in the main preview pane.

## Managing multi-camera source files

You can use the **Source Manager** to add and remove video and audio clips from tracks in your multi-camera project. You can also view information about the clips, such as the duration of the clip, clip location, and you can lock or unlock tracks.

## To add, remove or manage clips with the Source Manager

- 1 In the upper left corner of the timeline, click the **Source Manager** button **.**
- 2 In the **Source Manager** dialog box, do any of the following:
  - Click the **Lock/Unlock** button for a track to unlock a track for editing or to lock a track to prevent editing.

Multi-Camera editing 205

- To add a clip to a track, select a track, click the **Add Clips** button , navigate to the clip you want to add, and click **Open**. The clip appears in the numbered list for the track.

## Saving and exporting your multi-camera project

When you finish building your multi-camera project, you can save it so that it can be edited, exported, and shared from VideoStudio.

**Important!** It's recommended that you finish your multi-camera editing before you exit the **Multi-Camera Editor**. Changes that you make to your project in VideoStudio might not be supported if you re-open the project in the **Multi-Camera Editor**. This means that some changes will be reverted.

#### To save your multi-camera project

 Click the OK button at the bottom of the window to save your project to the current name (as indicated in the upper-right corner of the window). This also closes the Multi-Camera Editor.

If you want to rename your project, before you exit, click the **Settings** button choose **Save As**, and type a name in the **Project name** box.

Your multi-camera project appears in the VideoStudio Library.

To open your multi-camera project (.vsp) in VideoStudio, in the **Edit** workspace, drag your multi-camera project from the Library to the Timeline. By default, the project appears as a composite clip. To expand the clip to work with individual tracks, hold the Shift key when you drag the project from the Library and drop it in the Timeline.

# Using Smart Proxy with the Multi-Camera Editor

The main purpose of **Smart Proxy** is to provide a more fluid editing and previewing experience when working with large, high resolution video files.

**Smart Proxy** creates lower resolution working copies of larger source files. These smaller files are called "proxy" files. Using proxy files speeds up editing of high resolution projects (for example, projects that have HDV and AVCHD source files).

Smart Proxy can be set and adjusted in the VideoStudio workspaces or in the Multi-Camera Editor. For more information, see "Using Smart Proxy for a faster, smoother editing experience" on page 44.



With your movie project finished, it's time to save and share it. When you save your project, all the files are combined to create a single video file in a process called rendering.

You can save your movie as a video file that can be played on a computer or a mobile device, burn your project to a disc complete with menus, or upload your movie directly to a YouTube, Flickr, or Vimeo account.

This section contains the following topics:

- Choosing a sharing option
- Saving to video files for computer playback
- Saving a track as an alpha channel video
- Saving to video files for mobile devices
- Saving HTML5 video files
- · Uploading to the Web
- Creating 3D video files
- Creating video files from part of a project (trimmed)
- Creating sound files
- · Working with custom profiles in the Share workspace

## Choosing a sharing option

Corel VideoStudio provides the following sharing categories:

- **Computer** Save to a file format that lets you play your movie on computers. You can also use this option to save the video soundtrack to an audio file. For more information, see "Saving to video files for computer playback" on page 208 and "Creating sound files" on page 215.
- Device Save to a file format that lets you play your movie on mobile devices, game consoles, or cameras. For more information, see "Saving to video files for mobile devices" on page 209.
- HTML5 If you chose File > New HTML5 project at the start of your project or opened an HTML5 project, this output option becomes available in the Share workspace. This format is compatible with a broad range of browsers, including Safari. For more information, see "Saving HTML5 video files" on page 211.
- **Web** Upload your movie directly to YouTube, Flickr, or Vimeo. Your movie is saved in an optimal format for the site you choose. For more information, see "Uploading to the Web" on page 212.

Save and share 207

- **Disc** Save and burn your movie to a disc or SD card. For more information, see "Burn discs" on page 217.
- **3D Movie** Save your movie to a 3D playback format. For more information, see "Creating 3D video files" on page 213.
- VideoStudio Project If you chose File > New HTML5 project at the start of your project, you can save a copy in the native Corel VideoStudio format (\*.vsp). For more information, see "To save an HTML5 project as a Corel VideoStudio Pro project (VSP)" on page 212.

## Saving to video files for computer playback

Corel VideoStudio lets you save your movie project to video file formats that you can playback on computers.



Before rendering your entire project into a movie file, make sure you first save it as a Corel VideoStudio project file (\*.vsp) by clicking **File** > **Save** or **Save As**. This lets you return to your project at any time and make edits.

### To create a video file for computer playback

- **2** Click one of the following buttons to view and choose the profile for your video:
  - AVI
  - MPEG-2
  - AVC/H.264
  - MPEG-4
  - WMV
  - MOV
  - Audio
  - Custom

If you want to use the Project Settings for the video file, enable the **Same as Project Settings** check box located above the buttons.

3 In the **Profile** or **Format** drop-list, choose an option.

If you want to create a custom profile, click the **Create Custom Profile** button **\( \psi\)**. For more information, see "Working with custom profiles in the Share workspace" on page 216.

- 4 In the **File name** box, type a file name.
- 5 In the File location box, specify the location where you want to save the file.
- **6** Set any of the following options:

- Create Preview Range Only renders only the section of video that is selected between the Trim Markers in the Preview panel.
- Enable Smart Render analyzes a video for any previously rendered sections and renders only the new or revised sections. This can reduce rendering time significantly.

#### 7 Click Start.



Press the [Esc] key to cancel the rendering process.

A progress bar appears when you render a video. You can use the buttons on the progress bar to do the following:

- Click the **Pause/Play** button **III** on the progress bar to pause and resume the rendering process.
- Click the playback button to enable the preview while rendering or stop the preview to reduce rendering time.



The rendering progress bar

## Saving to video files for mobile devices

You can save your movie project to file formats that you can playback on a variety of mobile devices, such as smartphones, tablets, and game consoles. Corel VideoStudio includes a range of profiles that optimize your video for specific devices.

## To create a video file for a portable device or camcorder

- 1 In the **Share** workspace, click the **Device** button
- 2 Click one of the following buttons to view and choose the profile for your video:
  - **DV** Convert the project to a DV-compatible video file that can be written back to a DV camcorder. Connect your camcorder to the computer, turn your camcorder on, and set it to **Play/Edit** mode. See your camcorder's manual for specific instructions.
  - **HDV** Convert the project to an HDV-compatible video file that can be written back to an HDV camcorder. Connect your camcorder to the computer, turn your camcorder on, and set it to **Play/Edit** mode. See your camcorder's manual for specific instructions.
  - **Mobile Device** Creates a high-definition MPEG-4 AVC file that is compatible with most tablets and smartphones, including iPad, iPhone, and Android devices.
  - Game Console Create MPEG-4 AVC video files that are compatible with PSP devices.
- 3 In the **Profile** drop-list, choose an option.
- 4 In the File name box, type a file name.
- 5 In the File location box, specify the location where you want to save the file.
- **6** Set any of the following options:

Save and share 209

- Create Preview Range Only renders only the section of video that is selected between the Trim Markers in the Preview panel.
- Enable Smart Render analyzes a video for any previously rendered sections and renders only the new or revised sections. This can reduce rendering time significantly.

#### 7 Click Start.



Press the [Esc] key to cancel the rendering process.



You can also write back to a DV camcorder in the **Edit** workspace by right-clicking a video clip in the **Library** and choosing **DV Recording**.

## Saving a track as an alpha channel video

Alpha channel video supports transparency, allowing you to save animated logos, lower-third graphics, and other objects and animations as video files that you can share and reuse as overlays in other video projects. For example, if you create a series of videos, you can overlay the start of each video with an animated title that identifies you or your company as the creator of the series.

## To export a track as an alpha channel video

1 In the **Share** workspace, click the **Computer** button **\_\_\_**.



- 3 From the **Profile** drop-list, choose one of the **Alpha channel video** profiles.
- 4 In the File name box, type a file name.
- 5 In the File location box, specify the location where you want to save the file.
- **6** Set any of the following options:
  - Create Preview Range Only renders only the section of video that is selected between the Trim Markers in the Preview panel.
  - Enable Smart Render analyzes a video for any previously rendered sections and renders only the new or revised sections. This can reduce rendering time significantly.
  - Enable Hardware Encoder Acceleration can speed up processing by optimizing available hardware. Choose an option from the Type drop-list (see other settings in Preferences > Performance > Hardware acceleration).
- 7 In the **Export Track** drop-list, choose the track that you want to export.
- 8 Click Start.

The exported video preserves any transparent areas.

## Saving HTML5 video files

If you chose **File** > **New HTML5 project** at the start of your project, the **HTML5 Files** output option displays in the **Share** workspace.

HTML5 projects can include hyperlinks and chapters. This video format is compatible with browsers that support HTML5 technology, including most of the latest browsers and Safari, which is used on iPhone, iPad, and iPod touch devices.

You can save your HTML5 video projects directly to cloud-based storage services, such as Dropbox and Google Drive. For more information about sharing from these cloud-based services, refer to the Dropbox or Google Drive Help.

For more information about starting an HTML5 project, see "Creating new projects" on page 11.

### Saving an HTML5 project as an editable Corel VideoStudio project

If you might need to edit the project later and output it to formats other than HTML5, you can save a copy of the project to the native Corel VideoStudio Pro format (\*.vsp).

### To create an HTML5 video folder

- 1 In the **Share** workspace, click the **HTML5 File**s button **[**
- 2 Modify any of the following settings:
  - WebM In the Video format area, mark the WebM format check box if you want to use the WebM format. (Recommended)
  - Dimensions Choose the screen resolution and aspect ratio from the drop-list.
  - Flatten audio and background video In the **Dimensions** area, mark this check box if you are not sure if your browser supports more than a single video or audio track. (Recommended)
- 3 In the **Project folder name** box, type a name.
- **4** In the **File location** box, specify the location where you want to save the folder. If you want to save it to a cloud-based storage service, browse for the local folder of your preferred service.
- **5** Set any of the following options:
  - Create Preview Range Only renders only the section of video that is selected between the Trim Markers in the Preview panel.
  - Enable Smart Render analyzes a video for any previously rendered sections and renders only the new or revised sections. This can reduce rendering time significantly, but is not available for WebM output.
- 6 Click Start.

You can view the video from your output folder by opening Index.html in your browser.

Save and share 211



Press the [Esc] key to cancel the rendering process.

A progress bar appears when you render a video. You can use the buttons on the progress bar to do the following:

- Click the Pause/Play button III on the progress bar to pause and resume the rendering process.
- Click the playback button **t** to enable the preview while rendering or stop the preview to reduce rendering time.



The rendering progress bar

## To save an HTML5 project as a Corel VideoStudio Pro project (VSP)



- 2 In the **Subject** box, type your subject information.
- 3 In the **Description** box, type a project description.
- **4** From the **File format** drop-list, choose a VSP version.
- 5 In the **File name** box, type a file name.
- 6 In the **File location** box, specify the location where you want to save the project.
- 7 Click Start

## Uploading to the Web

Share your video projects online by uploading your videos to YouTube (in 2D and 3D formats), Flickr, and Vimeo. You can access your accounts from within Corel VideoStudio. If you don't have an existing account, you will be prompted to create an account.

The first time you log in from Corel VideoStudio, you are asked to authorize the connection between your online account and Corel VideoStudio. This authorization allows for the exchange of limited information related to the successful upload of your video.

As with any video upload, the online site usually requires time to post the video after it has been uploaded.



Please make sure to abide by the terms of use regarding copyright ownership of video and music as set by YouTube, Flickr, and Vimeo.

## To upload your video to YouTube, Flickr, or Vimeo

1 In the **Share** workspace, click the **Web** button ...

- 2 Click one of the following buttons:
  - YouTube
  - Flickr
  - Vimeo

If you need to sign in, the **Log In** button appears. Click the button to sign in. If it is the first time you are signing in, you will be asked to authorize the connection between Corel VideoStudio and your online account.

- **3** Fill in the necessary information such as your video title, description, privacy settings and additional tags.
  - If you want to upload a 3D video to YouTube, enable the **Save as 3D video** check box under the **Privacy** box.
- **4** Enable one of the following options:
  - **Upload project** you can accept the default settings, or choose a profile from the drop-list. Type a name in the **File name** box and choose a **File location**.
  - **Upload file** choose a saved video file from the **Open Video File** dialog box, and click **Open**.
- **5** Set any of the following options:
  - Create Preview Range Only renders only the section of video that is selected between the Trim Markers in the Player panel.
  - Enable Smart Render analyzes a video for any previously rendered sections and renders only the new or revised sections. This can reduce rendering time significantly.
- 6 Click Start.

A message appears when the upload is complete.



To log in to a different user account, first click the **Log Out** button that appears below the **YouTube**, **Flickr**, and **Vimeo** buttons. You can then log in to a different user account.

YouTube currently supports only 3D files in MP4 format, so if you upload a previously saved 3D video, please ensure that the older file is compatible. Side-by-Side 3D is recommended.

## Creating 3D video files

Corel VideoStudio lets you create 3D video files or convert regular 2D video to 3D video files. It's important to refer to the instructions for your 3D playback device so that you know what type of files and equipment you'll need for viewing your 3D video. For example, you might require only generic red and blue glasses (anaglyph) or you might require special polarized glasses to view a polarized TV screen.

Save and share 213

### To create 3D video files

- 1 In the **Share** workspace, click the **3D Movie** button **5.**
- **2** Click one of the following buttons:
  - MPEG-2
  - AVC/H.264
  - WMV
  - MVC
- 3 In the **Profile** or **Format** drop-list, choose an option.

If you want to create a custom profile, click the **Create Custom Profile** button +. For more information, see "Working with custom profiles in the Share workspace" on page 216.

- **4** Choose one of the following 3D conversion options:
  - **Anaglyph** Requires only the red and blue generic anaglyph 3D glasses to view 3D video without the need for special display monitors.
  - **Side-by-side** Requires polarized 3D glasses and a compatible polarized display monitor to view 3D video.
- 5 In the **File name** box, type a file name.
- 6 In the File location box, specify the location where you want to save the file.
- **7** Set any of the following options:
  - Create Preview Range Only renders only the section of video that is selected between the Trim Markers in the Player panel.
  - Enable Smart Render analyzes a video for any previously rendered sections and renders only the new or revised sections. This can reduce rendering time significantly.
- 8 Click Start.



Press the **[Esc]** key to cancel the rendering process.

A progress bar appears when you render a video. You can use the buttons on the progress bar to do the following:

- Click the **Pause/Play** button **III** on the progress bar to pause and resume the rendering process.
- Click the playback button **t** to enable the preview while rendering or stop the preview to reduce rendering time.



The rendering progress bar

## Creating video files from part of a project (trimmed)

For any of the sharing categories, you can create a video from part of your project, rather than the full project, by using the **Trim Markers** below the **Preview** window and enabling the **Create Preview Range Only** check box.

For more information about using the Player panel, see "Using the Player panel" on page 25.

## To create a video file from a trimmed range

- 1 In the **Share** workspace, click a sharing category, click an output option, and choose your settings.
- 2 Ensure that the Create Preview Range Only check box is marked.
- 3 In the Player panel, click **Project**.
- **4** Select a range by dragging the orange **Trim Markers** to the start and end points you want.



Only the area between the orange Trim Markers is rendered

5 In the bottom-right corner of the Share workspace, click **Start**.

## Creating sound files

Corel VideoStudio lets you create a sound file from an existing video file. This is especially useful when you want to use the same soundtrack with another set of images, or when you want to convert the audio from a live performance into sound files. Corel VideoStudio makes it easy for you to create an audio file of your project in M4A, OGG, WAV or WMA formats.

### To create an audio file

- 1 In the **Share** workspace, click the **Computer** button **\_\_\_**, and click **Audio**.
- 2 From the **Format** drop-list, select an audio file format.

  If you want to adjust the settings for the format, click the **Options** button any of the settings on the **Profile** or **Attributes** pages.
- 3 In the File name box, type a file name.
- 4 In the File location box, specify the location where you want to save the file.
- **5** Set any of the following options:
  - Create Preview Range Only renders only the section of video that is selected between the Trim Markers in the Player panel.

Save and share 215

• Enable Smart Render — analyzes a video for any previously rendered sections and renders only the new or revised sections. This can reduce rendering time significantly.

#### 6 Click Start.

# Working with custom profiles in the Share workspace

Before you output projects from the **Share** workspace, you can create and save custom profiles for most video file formats in the **Computer** and **3D Movie** sharing categories—only the **Audio** and **Custom** output formats do not support custom profiles.

For more information about custom profiles, see "Creating custom profiles" on page 43.

### To create a custom profile in the Share workspace

- 1 In the **Share** workspace, click the **Computer** button or **3D Movie** button ...
- 2 Click an output format button.
- **3** From the **Profile** drop-list, click an existing profile to use as a base for your custom profile.
- 4 Click the Create custom profile button +.
- 5 In the **New Profile Options** dialog box, click the **Corel VideoStudio** tab, and type a name in the **Profile name** box.
- 6 Click the General tab, and choose the settings you want.
  Note: Additional tabs and settings are available depending on the type of format you choose.
- 7 Click OK.
  The custom profile appears in the Profile drop-list.

## To edit a custom profile in the Share workspace

- 1 In the **Share** workspace, select the output format for which you created the profile, and choose the profile from the **Profile** drop-list.
- 2 Click the Edit custom profile button .
- 3 In the Edit Profile Options dialog box, change the settings you want and click OK.

## To delete a custom profile in the Share workspace

- 1 In the **Share** workspace, select the output format for which you created the profile, and choose the profile from the **Profile** drop-list.
- 2 Click the **Delete custom profile** button ...



Corel VideoStudio lets you burn your projects to a DVD, AVCHD, or Blu-ray disc. Alternatively, you can export your project to an SD card.

This section contains the following topics:

- Saving a project to disc
- · Assembling files
- Adding and editing chapters
- Editing a menu template
- Creating advanced menus
- Previewing your movie and menu before burning
- Burning your project onto a disc
- Copying a disc image file
- Creating disc labels

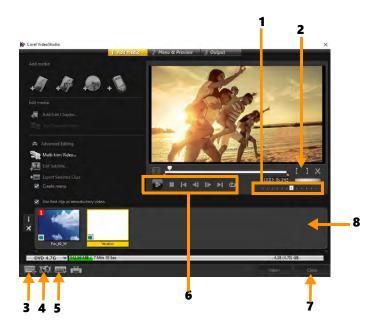
# Saving a project to disc

## To output your project to a disc

- 1 On the **Share** workspace, click the **Disc** button.
- **2** Choose one of the following output formats:
  - DVD
  - AVCHD
  - Blu-ray
  - SD Card

A new window appears where you can customize the disc output.

Burn discs 217



Part	Description
1 — Jog Slider	Lets you jump to specific scenes.
2 — Mark-in/Mark-out	Sets a preview range in the project, or sets the start and end points for trimming a clip.
3 — Settings and options	Lets you access the <b>Preferences</b> dialog box and the <b>Disc Template Manager</b> .
4 — Project Settings	Lets you determine how your movie project is rendered when you preview it.
5 — Change display aspect ratio	Lets you select between 4:3 and 16:9 aspect ratios.
6 — Navigation panel	Provides buttons for playback.
7 — Close button	Closes the <b>Create Disc</b> dialog box and opens the <b>Save As</b> dialog box.
8 — Media Clip List	Displays the added media clips as thumbnails.



Even if you have not saved your VideoStudio Pro project as a \*.vsp file, it can be brought into the **Create Disc** dialog box for burning.



Imported videos are automatically adjusted to the correct aspect ratio (as specified in the Disc Templates Manager dialog box), and are letterboxed or pillarboxed to fit the correct aspect ratio.

### To save a disc output project

- 1 On the disc output window, click the **Close** button. The **Save As** window opens.
- 2 In the File name box, type a file name.
- 3 In the Save in drop-list, select a file location.
- 4 In the Save as type drop-list, select a file format.

  You can select a file format that is compatible with earlier versions of VideoStudio.
- 5 Click Save.

**Note:** A check mark **⊘** on the disc format button indicates that the disc project has been saved. Click the previously selected disc format button to continue the disc output process. You can also edit the disc project at a later time. Click **File > Open Project** and select your saved VideoStudio Pro project file (\*.vsp).

## **Assembling files**

You can import videos or VideoStudio Pro project files (\*.vsp) that you want to include in your final movie.

### To add videos

1 Click **Add video files**. Locate the folder where the videos are stored. Select one or more video clips.



2 Click Open.

**Note:** After a video clip is added to the Media Clip List, you may see a black thumbnail that may be caused by a black first frame of the video clip. To change it, click on the video clip and move the Jog Slider to the scene that you want. Right-click the thumbnail and choose **Change Thumbnail**.

## To add VideoStudio Pro projects

1 Click **Add VideoStudio project files**. Locate the folder where the projects are stored. Select one or more video projects you want to add.



2 Click Open.



You can also add videos from DVD, AVCHD, and BDMV discs.

Burn discs 219

You can trim video clips and VideoStudio Pro projects by using the Jog Slider, Mark-in/out, and navigation controls. Trimming a video gives you the freedom to precisely edit the video length.

## Adding and editing chapters

This feature is available only when the **Create menu** option is selected. By adding chapters, you can create submenus linked to their associated video clip. When you add chapter points to your VideoStudio project, these are automatically converted to disc menu chapters. For more information, see "Adding cues and chapters" on page 47.



You can create up to 99 chapters for a video clip.



Represented as a video thumbnail in a submenu, each chapter is like a bookmark for a video clip. When viewers click a chapter, the playback of the video will start from the selected chapter.

If the **Create menu** option is not selected, you will be guided to the preview step immediately without creating any menus after clicking **Next**.



When you are creating a disc with only one VideoStudio Pro project or one video clip, do not select **Use first clip as introductory video** if you want to create menus.

## To create or edit chapters linked to a video clip

- 1 Select a video in the Media Clip List.
- 2 Click Add/Edit Chapter.

3 Drag the **Jog Slider** to move to a scene that you want to set as a chapter point, and click **Add Chapter**. You can also click **Auto Add Chapters** to let VideoStudio Pro automatically select chapters.

**Note:** If you want to use **Auto Add Chapters**, your video must be at least one minute long or the video has scene change information.

- **4** Repeat Step 3 to add more chapter points.
- 5 Click OK.
- You can also use **Remove Chapter** or **Remove All Chapters** to delete unwanted chapters.
- If you click **Auto Add Chapters** and your video is a DV-formatted AVI file, the program automatically detects scene changes and add chapters accordingly. For MPEG-2 files, the program uses the scene change information to automatically generate chapters.

### **Creating disc menus**

Disc menus allow viewers to easily navigate through the contents of a disc and easily choose the specific parts of the video to watch.

In Corel VideoStudio, you can create disc menus by applying menu templates and editing them to suit the requirements of your projects.

## To apply a menu template

- 1 Select Create menu in the 1 Add Media page and click Next. This takes you to the 2 Menu & Preview page.
- 2 In the Gallery tab, click the menu template thumbnail to apply it.

## To apply layout settings to other menu pages

• Click Layout Settings in the Edit tab and select Apply to All Pages of this Menu.

## To add background music to menus

- 1 Click the **Set the background music** button in the **Edit** tab and choose from a menu of options for selecting an audio file to be used as background music.
- In the Open Audio File dialog box, choose the audio file to use.
   Note: Click the Set audio properties button to adjust the duration of your audio and apply fade in and out effects.

Burn discs 221

### To add background image or video to menus

- 1 Click the **Set the background** button in the **Edit** tab and choose from a menu of options for selecting an image or a video file to be used as background image or video.
- 2 In the **Open Image File** or the **Open Video File** dialog box, choose the image file or the video to use.

### To add motion menus

- 1 Select **Motion menu** in the **Edit** tab.
- 2 Adjust the duration of the video thumbnail by setting the number of seconds in **Duration**.

**Note:** Using motion menus increases the file size. Check the disc space usage indicator and the **Required menu space** value to make sure that the file size remains within the limits of your selected output.

## Editing a menu template

To edit a menu template, choose options in the **Edit** tab or click menu objects in the **Preview Window**. You can also add new texts, decorations and note menus. Customized templates can then be saved as new menu templates.

If you are authoring Blu-ray discs, you can create advanced menus that can be used without interrupting playback. This means that viewers can navigate the contents of your disc while watching the movie.

## To edit text style in menus

- 1 Right-click a text object in the Preview Window and select **Font Attributes**.
- 2 Modify text attributes in the **Font** dialog box.



Clicking Font Settings in the Edit tab also opens the Font dialog box.

## To resize, rotate, and distort menu objects

• Click the menu object in the Preview Window and drag the handles or nodes.



To revert objects to its previous state, right-click on the Preview Window and select **Set** to **0 Degree Angle** or **Remove Object Distortion** 

### To align a single menu object

• Click the menu object in the Preview Window and drag it to the desired position.



To use the grid lines as reference when dragging the menu objects, right-click the Preview Window and select **Show Grid Line**. To automatically align your object to the nearest grid line as you drag it, select **Snap to Grid Line**.

Make sure that the objects are within the TV safe area (defined by a border with dotted lines).

## To align multiple menu objects

- 1 Select the objects in the Preview Window by pressing [Ctrl].
- 2 Right-click, select **Align**, and choose from the following options:
  - Left/Top/Right/Bottom Moves all selected objects (except model object) horizontally to align left/top/right/bottom side with the left/top/right/bottom side of model object.
  - Center Vertically Moves all selected objects vertically to the center of top/ bottommost objects.
  - **Center Horizontally** Moves all selected objects horizontally to the center of left/rightmost objects.
  - **Center Both** Moves all selected objects to the center of top/bottom/left/rightmost objects.
  - **Space Evenly Vertically** Moves all selected objects (except top/bottom most objects) vertically to even vertical space. This menu item is only available when more than three objects are selected.
  - Space Evenly Horizontally Moves all selected objects (except left/right most objects) horizontally to even horizontal space. This menu item is only available when more than three objects are selected.
  - **Equal Width/Height** Resizes all selected objects (except model object) to the same width/height as model object.
  - **Equal Width and Height** Resizes all selected objects (except model object) to the same width and height as model object.

## To arrange the Z-order of menu objects

- Right-click the menu object in the Preview Window, select **Align**, and choose from the following alignment options:
  - **Bring Forward** Brings selected object one layer forward.
  - **Send Backward** Sends selected object one layer backward.

Burn discs 223

- **Bring to Front** Brings selected object to front.
- **Send to Back** Sends selected object to the layer just above the background object.

### To copy and paste shape menu object attributes

 Right-click the menu object in the Preview Window and select Copy Shape Attributes or Paste Shape Attributes.

**Note:** You can copy and paste attributes such as width, height, rotation degree, distortion, transparency, shadows and highlights. Text boundary, however, cannot be copied.

### To add menu filters and transition effects

- 1 Click a menu object in the Preview Window.
- **2** Choose the filter or effects to apply in the **Edit** tab.
  - Moving Path Applies a predefined motion path to menu objects such as titles, thumbnail buttons, and navigation buttons.
  - Menu In/Menu Out Opens selection filters and transition effects. If a menu template has a Menu In effect, its default duration is 20 seconds.



Some template menus have sound effects for **Menu In** and **Menu Out** transitions. These sound effects, however, cannot be modified nor deleted.

## Creating advanced menus

Advanced menu templates are made up of three separate layers for background settings, title menus, and chapter menus. You can edit menu objects in the currently selected layer.

The illustration below shows the structure of a disc menu.



Submenu #1

In this example, Clip 1 has three chapters, so when you click the Clip 1 video thumbnail, it jumps to submenu #1. If you look at Clip 2, it has no chapters assigned to it, so when you click Clip 2, the video starts playing from the beginning.

### To add a title menu

Click Advanced Settings in the Edit tab and select Add Title Menu.

### To add chapter menus

• Click **Advanced Settings** in the **Edit** tab and select **Create Chapter Menu**.

### To show the menu thumbnail numbers

Click Advanced Settings in the Edit tab and select Show Thumbnail Number.

### To create a menu template:

- 1 Click **Customize** in the **Edit** tab of the **2 Menu & Preview** page. The **Customize Menu** dialog box appears.
- 2 Choose from the following options:
  - Set the background music Lets you choose an audio file to be used as background music.
  - **Set the background** Lets you choose an image or a video file to be used as background image or video.
  - Font Settings Lets you apply text attributes.
  - Pan & Zoom Lets you apply pan and zoom effects.
  - Motion Filter Lets you apply motion effects.
  - Menu In/Menu Out Lets you apply menu motion effects.
- 3 In the drop down menu, select **Frame**, **Navigation Button**, or **Layout** to display the associated preset thumbnails. Double-click a thumbnail to apply it.
  - **Note:** You can also resize, distort, rotate, and move menu objects in the Preview Window.
- 4 Click Add to Menu Template to add the template to the Favorites folder.
  - **Note:** When working in the **Customize Menu** dialog box, use the **Font** dialog box to accurately resize text. The **Font** dialog box can also be launched by right-clicking the text and selecting **Font Attributes**.

## Previewing your movie and menu before burning

Now, it's time to see how your movie looks before you burn it onto a disc. Simply move the mouse and click **Play** to watch your movie and test the menu on your computer. Use the navigation controls here as you would on a standard remote control of a standalone disc player.

Burn discs 225



## Burning your project onto a disc

This is the final step in the disc creation process. You can burn your movie to a disc, save it to a folder on your hard drive, or create a disc image file so that you can burn the movie at a later time.



## **Burning options**

- **Disc burner** Specifies the settings for your burning device.
- Label Enables you to enter a volume name for the Blu-ray Disc/DVD. The label can contain a maximum of 32 characters.
- **Drive** Selects the disc burner that you want to use to burn the video file.
- Copies Sets the number of disc copies to burn.
- **Disc type** Displays the output disc format for the current project.
- Create to disc Allows you to directly burn your video project onto a disc.
- Recording format Select DVD-Video format to use the DVD industry standard. To
  quickly re-edit your disc without copying the file to the hard drive, select DVD-Video

- (fast re-editable) which still complies with the industry standard and has very high compatibility when working with set-top home DVD players and computer DVD-ROM.
- Create DVD folders This option is only enabled when the video file being created is a DVD-Video. The files created are in preparation for burning the video file to an AVCHD or Blu-ray Disc. This also allows the user to view the finished disc folders on the computer using a disc playback software like Corel® WinDVD®.
- Create disc image Select this option if you plan to burn the video disc several times. By selecting this option, you don't have to generate the file again when you want to burn the same video disc. This option is only available for DVD-Video and disabled for AVCHD, and Blu-ray Disc projects.
- Normalize audio Different video clips may have different audio recording levels when
  created. When these video clips are put together, the volume may vary greatly. To make
  volume levels consistent between clips, the Normalize audio function evaluates and
  adjusts the audio waveform of the whole project to ensure a balanced audio level
  throughout the video.
- **Erase** Deletes all the data on a rewritable disc.
- Burning Options Adjusts the advanced output settings for burning your project.
- **Delete temp files** Removes all unnecessary files in your working folder.
- **Burn** Begins the recording process.
- Required space Serves as a reference when you burn your projects. These indicators
  help determine if you have sufficient space to successfully burn your project onto the
  disc.
- Required/Available hard disk space Displays the space needed by the project and the available hard drive space.
- Required/Available disc space Displays the space needed to fit the video file on the disc and the space that is available for use.

## To burn your movie onto a disc

- 1 Click **Next** after you preview your project.
- 2 Click **Show more output options** and enable one or more of the following options:
  - Create DVD folders Creates DVD folders in a specified location.
  - Create disc image Creates an ISO image file of the DVD.
  - Normalize audio Evens out irregular audio levels during playback.

**Note: Create disc image** is disabled for AVCHD and Blu-ray Disc projects.

3 Click More settings for burning.

The **Burning Options** dialog box appears. Define additional burner and output settings and click **OK**.

**4** Click **Burn** to start the burning process.

Burn discs 227

Click **OK** when prompted that the task is done.

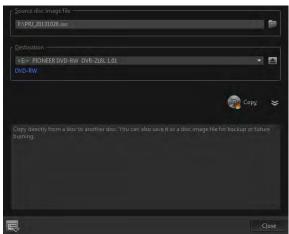
5 Click Close to save your work automatically and return to the Corel VideoStudio Editor.

## Copying a disc image file

A disc image file is a single file that has captured the entire contents and file structure of a disc. Creating a disc image file on your computer allows you to archive the source disc contents for backup or future burning. You will need sufficient space on your computer to store the disc image file.

### To copy a disc image file:

- 1 Insert a blank disc into your disc burner.
- 2 Click Tools > Burn from Disc Image (ISO). The disc copying dialog box is displayed.



- 3 In Source disc image file, browse and select your source disc image (\*.iso) file.
- **4** Choose your burner drive in **Destination**.
- **5** Click **Copy** to start copying.



Click to set burning preferences.

## Creating disc labels

Create and print disc labels, case covers, and inserts in Corel VideoStudio. You can add and edit images, texts, and icons to complete your layout.

## To launch the disc label creation dialog box

• Click the **Print disc label** icon at the lower left part of the **Create disc** dialog box.



### General tab

The **General** tab allows you to select a disc label or disc cover template to start with. You can then customize the overall design of the disc label, disc cover, insert, or booklet. The actual dimensions of your media or label in relation to the selected paper size is displayed to serve as your guide.

### Image tab

The **Image** tab allows you to adjust the properties of your images.

### Text tab

The **Text** tab allows you to format and adjust the properties of your texts.

### Disc label creation options

You can do any of the following tasks when designing a disc label.

- Files
  - Load Disc Label Opens a previously saved disc label project.
  - Save Disc Label Saves a disc label project.
- Add Image Selects an image to add on the label.
- Add Text Adds a text object to the label.
- Add Icon Adds an icon to the label.
- Playlist Opens the Add/Edit Playlist Information dialog box to allow you to add information on the label such as the album title, artist name, as well as date.
- **Clear content** Removes all objects and background from the disc layout. This is useful when starting over with your design.

## Other options

- **Show/Hide Disc** Shows/hides the outline of the disc for better alignment of images or text.
- Show/Hide Grid Shows/hides gridlines for laying out images and text symmetrically.

Burn discs 229



### **Aperture**

This camera setting measures the size of the opening in the lens. It controls the amount of light that gets into the camera. The aperture setting is measured in f-stops that follow the format f/number. For example, f/22.

### **Aspect Ratio**

The relationship of width to height for a given image or graphic. Keeping or maintaining the aspect ratio refers to the process of maintaining size relationships when either the width or height of an image or graphic is changed. In video, the two most common aspect ratios are 4:3 and 16:9 for Standard definition (SD) and High definition (HD) Widescreen video formats.

#### AVI

Audio-Video Interleave is a digital video file format designed specifically for the Microsoft Windows environment, now commonly used as storage for several audio and video codecs.

### **AVCHD**

Advanced Video Codec High Definition is a video format that is designed for camcorder use. It uses a disc structure designed for Blu-ray Disc / high definition compatibility and can be burned on standard DVDs.

### **Blu-ray Disc**

Blu-ray Disc is an optical disc format that uses a blue laser for high definition video recording and playback. Each disc also allows more information to be burned in 25-GB (single-layer) and 50-GB (dual-layer) discs, offering more than five times the capacity of standard DVDs.

### **Capture**

The recording of video or images to a computer hard disk.

## **Capture Plug-ins**

These are utilities integrated with Corel VideoStudio that allow the program to recognize capture devices and automatically detect them when they are connected to the computer.

### Clip

A short section or part of a movie. A clip can be audio, video, still images or a title.

## **Cloud-based storage**

A remote storage space that can be used for saving files. Instead of storing documents and media files on a local drive, files are saved in a remote database that can be accessed using a Web-connected device. Several companies offer cloud-based storage services that are available in both free and paid accounts.

#### Codec

Glossary 231

A special algorithm or program that is used to process video. The origin of the word is *compression/decompression or coder/decoder*.

### **Color Clip**

A simple background color used in a movie. It is often used for titles and credits since they stand out clearly against the solid color.

### Compression

Compression is achieved through a codec and works by removing redundant data or describing it in terms that can be decompressed. Nearly all digital video is compressed in some way or another but differs on the degree of compression. The more compressed, the more resources needed for playback.

#### **Data Rate**

The amount of data per second that is transferred from one part of your computer to another. These data rates vary in different types of media.

### **Device Control**

A software driver that allows programs to control video sources like the camcorder or VCR.

#### DNLE

Digital Non-Linear Editing is a method of combining and editing multiple video clips to produce a finished product. DNLE offers random access to all source materials at all times during the editing process.

#### **Driver**

A software program that controls the connection between a specific device and a computer.

#### **DSLR**

A type of camera that uses removable lenses and takes images using a reflex mirror system. The acronym DSLR stands for digital single-lens reflex. Compared to compact point and shoot cameras, DSLRs offer more manual controls and higher image quality.

### DV

Digital Video with a capital "D" and a capital "V" stands for a very specific format of video, just like VHS or High-8. This format can be understood (played back, recorded) by DV camcorders and your computer, if you have the proper hardware and software. DV can be copied from your camcorder to your computer, and then back to your camcorder (after editing, of course) without any loss of quality.

#### **DVD**

DVD (Digital Versatile Disc) is popular in video production because of its high quality and broad compatibility. Not only does it guarantee audio and video quality, DVDs make use of the MPEG-2 format, used to produce discs that are single- or double-sided, and single- or dual-layer. They can be played on standalone DVD players or on the DVD-ROM drive of your PC.

### **Effect**

In Corel VideoStudio, an effect is a special computer generated attribute applied to video clips that alters the appearance and quality of video to achieve a certain look.

#### Ev

The acronym stands for Exposure Value or the combination of settings for the aperture, shutter speed and ISO when the camera is in P (Programmed), S or Tv (shutter priority), or Av (aperture priority) mode. Adjusting the Ev can either overexpose or underexpose an image deliberately.

### **Export**

The process of sharing files. When you export a file, the data is usually converted into a format that is recognizable by the receiving application. The original file remains unchanged.

#### **Fade**

A transition effect where the clip gradually disappears or appears. In video, the picture would gradually change to or from a solid color; or from one image to another. For audio, the transition would be from full volume to complete silence or vice-versa.

#### **FireWire**

A standard interface used for connecting digital audio/video devices such as DV camcorders to computers. It is Apple's trademarked name for the IEEE-1394 standard.

### **Footage**

A length of recorded film intended for use in a larger project.

#### **Frame**

A single image in a movie.

#### **Frame Rate**

The number of frames per second in a video. NTSC video is commonly 29.97 frames per second (fps) while PAL has 25 fps, but smaller video files can be created on the computer by using lower frame rates.

### **Frame Size**

The size of displayed images in video or animation sequences. If an image intended for the sequence is larger or smaller than the current frame size, it must be resized or cropped.

#### **HDV**

HDV is a format for recording and playback of high-definition video on a DV cassette tape. Announced in 2003 as an affordable high definition format, HDV video supports resolutions up to  $1440 \times 1080$  and is compressed with MPEG-2. HDV audio is compressed using MPEG-1 Layer 2.

#### HTML5

A version of the Hypertext Markup Language (HTML) standard that has increased feature support compared to previous versions. HTML5 is particularly useful in integrating audio and video files into web pages.

### **IEEE-1394**

Glossary 233

Also known as Firewire, 1394 is standard that allows high-speed serial connections between the computer and an HDV/DV camcorder, or other high speed peripheral device. Devices conforming to recent updates to this standard are capable of transmitting digital data at 400 megabits per second.

### **Instant Playback**

Allows you to view the entire project without rendering. It instantly plays all the clips in the Preview Window without creating a temporary preview file in your system. Playback quality is dependent on your hardware configuration.

If **Instant Playback** results in drop frames, then use **High Quality Playback** to preview a project.

#### ISO

This camera setting measures the sensitivity of the image sensor. A lower setting is ideal when there is enough light, while a higher setting is best when it is dark. Choosing the correct ISO setting reduces the noise or grain on the captured image.

### **Key frame**

A specific frame in a clip that is flagged for special editing or other activities in order to control the flow, playback or other characteristics of the completed animation. For example, when applying a video filter, assigning different effect levels on the beginning and end frames shows a change in the appearance of the video from start to end of the video clip. When creating a video, assigning key frames on parts where there are high data transfer requirements helps control how smoothly the video plays back.

### **Library (Corel VideoStudio)**

The Library is the repository for all of your media clips. You can store video, audio, title, or color clips in the Library and instantly retrieve them for use in a project.

#### Link

A method of storing previously saved information in another program without significantly affecting the size of the resulting file. Linking offers another advantage in that the original file can be modified in its original program and the changes will automatically be reflected in the program where it is linked.

#### Mark In/Out

Points in a clip that have been marked for editing and trimming purposes. A section can be selected from a longer clip by setting its beginning (Mark in) and ending (Mark out).

## **Metering Mode**

This camera setting adjusts the exposure according to the brightness of the subject. The common options for metering mode include Evaluative, Partial, Spot, Center-weighted, and Multi-zone.

### **Motion Tracking**

A cinematic and video production technique that tracks specific objects in video clips. Video elements can be tracked by using selected and distinct sets of pixels that are used to track movement. This process can be done by the program automatically, tracked manually, or a

combination of both. It creates moving paths that can be used in seamlessly adding 2D and 3D graphics that appear to exist originally when shooting the video clip.

#### MP3

Abbreviation of MPEG Audio Layer-3. MP3 is an audio compression technology that produces near CD audio quality at a very small file size, making it transfer quickly over the Internet.

#### MPEG-2

A standard for video and audio compression used in products like DVD.

#### MPEG-4

A video and audio compression format that is commonly used in mobile devices and video streaming in the Internet that provides high-quality videos at lower data rates.

#### **NLE**

Non-Linear Editing. In the past, conventional editing on a VCR was necessarily linear because of the need to access clips on a video tape in order. Computer editing can be done in any order that is convenient.

#### **Noise**

Noise may be found in audio and video. In audio, it manifests as unwanted residual hiss while they are random image specks and dots onscreen in video. These are electronic interferences that are most common in analog audio and video.

### NTSC/PAL

NTSC is the video standard in North America, Japan, Taiwan, and some other regions. Its frame rate is 29.97 fps. PAL is common in Europe, Australia, New Zealand, China, Thailand, and some other Asian places, which has a frame rate of 25 fps. There are other differences. In the world of DV and DVD, NTSC has the video resolution of  $720 \times 480$  pixels, while PAL has  $720 \times 576$  pixels.

### **Overlay**

These are superimposed video or image clips over existing clips in your project.

### Plug-ins

Plug-ins are utilities that add more functions and effects to a program. In Corel VideoStudio, plug-ins have made it possible for the program to automatically recognize capture devices as well as output videos for different purposes such as for e-mail, Web page, video greeting cards, and DV recording.

#### **Profile**

A profile covers various attributes for a file such as bit rate, number and type of streams, compression quality, frame size and so on.

### **Project File**

In Corel VideoStudio, a project file (\*.VSP) contains the required information to link all associated image, audio, and video files. With Corel VideoStudio, you must open a project file before you can edit a video.

Glossary 235

#### Render

Rendering is the process of making a finished movie from the source files in a project.

#### **Scenes**

A scene is a series of continuous frames. In Corel VideoStudio, each scene that is captured by using the Split by Scene feature is based on the recording date and time of the footage. In a captured DV AVI file, scenes can be separated into several files based on the recording date and time of the footage or based on changes in the content of the video. In an MPEG-2 file, the content changes are used to separate scenes into files.

### **Shutter Speed**

This camera setting measures the amount of time that the shutter remains open. The shutter speed is measured in seconds. Fast shutter speeds are usually in fractions of a second (1/500, 1/250, 1/125, etc.). Slow shutter speeds are measured as whole numbers (1, 10, 30, etc.).

### **Smart Render**

Smart Render technology saves time when generating previews by rendering only the parts that have been modified from your last render operation.

### Split by scene

This feature automatically splits up different scenes into individual files. In Corel VideoStudio, the way scenes are detected depends on which step you are in. In the Capture workspace, Split by Scene detects individual scenes based on the original footage's recording date and time. In the Edit workspace, if Split by Scene is applied to a DV AVI file, scenes can be detected in two ways: by the recording date and time, or by the changes in the content of the video. Whereas in an MPEG file, scenes are detected only based on the content changes.

### **Storyboard**

A Storyboard is a visual representation of your movie. Individual clips are represented as image thumbnails on the Timeline.

### **Streaming**

Allows large files to be played as they are being downloaded. Streaming is commonly used for large video and audio files that are made available on the Internet through video-sharing Web sites.

## **Template**

A work pattern in a software program. They are predefined formats and settings to serve as guides in making projects.

#### Timecode

The timecode of a video file is a numerical way of representing the position in a video. Timecodes can be used to make very accurate edits.

#### **Timeline**

The Timeline is a graphic representation of your movie in chronological order. The relative size of clips on the Timeline gives you an accurate idea of the length of your media clips and the relative positions of titles, overlays and audio.

#### **Title**

A title can be a movie title, a caption or credit. Any text that overlays your video can be referred to as a title.

#### **Transition Effect**

A transition is a method of sequencing between two video clips, like fading from one into another.

#### **Trim**

The process of editing or cropping a video clip. Videos can be trimmed frame by frame.

### **Ultra HD (4K resolution)**

A video resolution that is approximately 4,000 pixels in width. It is also known as Ultra High-Definition or Ultra HD. The term is used to refer to all screen standards that are at least 3840 x 1080 pixels.

### **Video Filters**

A video filter is a method of changing the appearance of a video clip, like mosaic and ripple. It can be used as a corrective measure by compensating for shooting errors and can also be creative by achieving a certain effect to video.

#### Voice-over

The narration of a video or movie is commonly called the voice-over. This is most notable in documentary films.

### **White Balance**

This camera setting measures the color temperature of the subject. Different lighting conditions affect the way a camera measures the colors in a scene. Most digital cameras provide preset settings for automatic, sunlight, cloudy, fluorescent, and incandescent environments.

Glossary 237



This section contains the following topics:

- Menu command shortcuts
- Workspace shortcuts
- Navigation area shortcuts
- Timeline shortcuts
- Multi-trim Video shortcuts
- Layout settings shortcuts
- Screen capture shortcuts
- Other Shortcuts

Menu command shortcuts	
Create a new project	
Create a new HTML5 project	
Open a project	
Save a project	
Project Properties	
Preferences	
Undo	
Redo	
Сору	
Paste	
Delete	
Help	

Workspace shortcuts	
Alt + F10	Go to Capture workspace
Alt + F11	Go to Edit workspace
Alt + F12	Go to Share workspace

Navigation area shortcuts	
F3	Set mark-in
F4	Set mark-out

Shortcuts 237

L	Play/Pause
Ctrl + P	Play/Pause
Space	Play/Pause
Shift + Play button	Play the currently selected clip
K	Return to the start of clip or project
Home	Return to the start of clip or project
Ctrl + H	Return to the start of clip
End	Move to the end segment or cue
Ctrl + E	End
D	Previous frame
F	Next frame
Ctrl + R	Repeat
Ctrl + L	System Volume
S	Split Video
Tab	Toggle between the Trim Handles and Scrubber.
Enter	When the left Trim Handle is active, pressing <b>[Tab]</b> or <b>[Enter]</b> switches to the right handle.
Left	If you pressed <b>[Tab]</b> or <b>[Enter]</b> to make the Trim Handles or Scrubber active, use the Left-arrow key to move to the previous frame.
Right	If you pressed <b>[Tab]</b> or <b>[Enter]</b> to make the Trim Handles or Scrubber active, use the Right-arrow key to move to the next frame.
ESC	If you pressed <b>[Tab]</b> or <b>[Enter]</b> to activate and toggle between the Trim Handles and Scrubber, you can press <b>[Esc]</b> to deactivate the Trim Handles / Scrubber.

Timeline shortcuts	
Ctrl + A	Select all clips on the Timeline. Single title: Select all characters in the on-screen edit mode.
Alt + left arrow key/right arrow key	Moves the selected clip along the Timeline by one frame at a time.
Ctrl + X	Single title: Cut selected characters in the onscreen edit mode.
Shift + Click	Select multiple clips in the same track. (To select multiple clips in the Library, [Shift] + [Click] or [Ctrl] + [Click] the clips.)
Left	Select the previous clip on the Timeline.
Right	Select the next clip on the Timeline.
+ / -	Zoom in/out.

Scroll forward.
Scroll backward.
Scroll up.
Move to the start of the Timeline.
Move to the end of the Timeline.
The previous segment.
The next segment.

Multi-trim Video shortcuts		
Del	Delete	
F3	Set mark-in	
F4	Set mark-out	
F5	Go to start of clip	
F6	Go to end of clip	
Esc	Cancel	

Layout settings shortcuts	
F7	Switch to Default
Ctrl + 1	Switch to Custom #1
Ctrl + 2	Switch to Custom #2
Ctrl + 3	Switch to Custom #3
Alt + 1	Save to Custom #1
Alt + 2	Save to Custom #2
Alt + 3	Save to Custom #3

Screen capture shortcuts	
F10	Stop screen capture
F11	Pause / Resume screen capture

Other Shortcuts	
ESC	Stop capturing, recording, rendering, or close a dialog box without making any changes.  If you switched to Full Screen Preview, press [Esc] to return to the Corel VideoStudio workspace.

Shortcuts 239



Using the **DV-to-DVD Wizard**, you can capture video from FireWire-enabled DV and HDV tape camcorders, add a theme template, and then burn to DVD. This video-editing mode provides a fast and direct way to transfer your videos to a DVD.

You can launch the **DV-to-DVD Wizard** by clicking **Tools** > **DV-to-DVD Wizard**.

This section contains the following topics:

- Scanning for scenes
- Applying templates and burning to DVDs

## Scanning for scenes

Scan the DV tape and select the scenes that you want to add to your movie.

### To scan for scenes

- 1 Connect your camcorder to your computer, and turn on the device. Set your camcorder to **Play** (or **VTR/VCR**) mode.
- 2 Select a recording device under **Device**.
- 3 Click the Capture format arrow to select a file format for captured videos.
- **4** Specify whether to burn all videos of the tape (**Burn whole tape**) or scan your DV tape (**Scene detection**).

## To burn the whole tape

- 1 Select **Burn whole tape** and then specify the tape duration under **Duration**.
- 2 Click Next to apply the template and burn to DVD.

### To use scene detection

- 1 After selecting **Scene detection**, choose whether to scan the tape from the **Beginning** or **Current position**.
  - **Beginning** Scans the tape for scenes from the beginning. The tape will automatically be rewound if the tape position is not in the beginning.
  - Current position Scans the tape for scenes from the current tape position.

DV-to-DVD Wizard 241

**2** Specify the scan speed and click **Start Scan** to begin scanning the DV device for scenes. Scenes are video segments that are distinguished by date and time stamps on the DV tape.



**DV-to-DVD** Wizard

3 In the Storyboard View, select each scene that you want to include in your movie, and click **Mark Scene**.



4 Click Next.

**Note:** To save and import the scanned file without having to re-scan it, click the **Options** button and select **Save DV Quick Scan Digest**. To manage a large number of tapes, click **Save DV Quick Scan Digest as HTML**. This feature lets you print the HTML file and attach it with your tapes.

## Applying templates and burning to DVDs

Choose a style template, specify settings, and burn your movies to DVD.

## To apply a style template and burn to DVD

- Specify a volume name and recording format for your movie.
  Note: If you have more than one burner installed on your computer, or if the default drive is not a burner, specify the burner that you want to use in the Advanced Settings dialog box.
- **2** Choose a style template from one of the available presets to apply to your movie, and then select the output video quality.
- 3 To customize the theme template text, click **Edit Title**.

- 4 In the **Begin** tab of the **Edit Template Title** dialog box, double-click the text that you want to modify. You can also modify attributes such as font, color or shadow settings.
- **5** Click the **End** tab to modify the text. Click **OK**.
- **6** To mark your video clips with date information, click **Add as title** in **Video date information**. Select **Entire video** if you want the video to appear from beginning to end, or specify the duration.
- 7 Click the **Burn** button to burn your movie file to a disc.

Note: If the movie is too big to fit onto a DVD, click Fit & Burn.

DV-to-DVD Wizard 243

#### **Legal Notice**

Corel® VideoStudio® 2019 User Guide © 2019 Corel Corporation. All rights reserved.

Corel, the stacked and side-by-side Corel logo and Corel Balloon logo combination, VideoStudio, CorelDRAW, Corel DESIGNER, FastFlick, Painter, PaintShop, PaintShop Pro, Ulead, WinDVD, WinZip and WordPerfect are trademarks or registered trademarks of Corel Corporation and/or its subsidiaries. All other product names and any registered and unregistered trademarks mentioned are used for identification purposes only and remain the exclusive property of their respective owners.

Patents: www.corel.com/patent

Product specifications, pricing, packaging, technical support and information ("specifications") refer to the retail English version only. The specifications for all other versions (including other language versions) may vary.

INFORMATION PROVIDED HEREIN BY COREL IS PROVIDED "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABLE, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NON-INFRINGEMENT, OR THOSE ARISING BY LAW, STATUTE, USAGE OF TRADE, COURSE OF DEALING OR OTHERWISE. THE ENTIRE RISK AS TO THE RESULTS OF THE INFORMATION PROVIDED OR ITS USE IS ASSUMED BY YOU. COREL SHALL HAVE NO LIABILITY TO YOU OR ANY OTHER PERSON OR ENTITY FOR ANY INDIRECT, INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES WHATSOEVER, INCLUDING, BUT NOT LIMITED TO, LOSS OF REVENUE OR PROFIT, LOST OR DAMAGED DATA OR OTHER COMMERCIAL OR ECONOMIC LOSS, EVEN IF COREL HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR THEY ARE FORESEEABLE. COREL IS ALSO NOT LIABLE FOR ANY CLAIMS MADE BY ANY THIRD PARTY. COREL'S MAXIMUM AGGREGATE LIABILITY TO YOU SHALL NOT EXCEED THE COSTS PAID BY YOU TO PURCHASE THE MATERIALS. SOME STATES/COUNTRIES DO NOT ALLOW EXCLUSIONS OR LIMITATIONS OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU. This manual may not, in whole or part, be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine readable form without the prior agreement and written permission of Corel Corporation.