

VEGAS

DVD ARCHITECT

User Manual

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Legal Notices

For legal information, see <http://www.vegascreativesoftware.com>.

Introduction

Vegas proudly introduces DVD Architect, your one-stop shop for authoring and burning DVD and Blu-ray Disc projects.

DVD Architect lets you create menu-based discs, music/video compilations, picture compilations, or single-movie discs that will play back automatically in your DVD or Blu-ray Disc player.

What's new in this version

- Support for burning stereoscopic 3D video to Blu-ray Disc.
- Interactive tutorials.
- 20 new themes added

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More license information can be found [online at the Vegas web sites](#).

MAGIX licensing conditions are included in the installation and also at www.magix.com under EULA.

Technical Support

If you experience problems or have questions while using DVD Architect, our technical support department is always ready to help you. Additional support and information can be found at <http://www.vegascreativesoftware.com>.

For a detailed list of Technical Support options, please visit our [web site](#).

Interactive Tutorials

Choose Help > Interactive Tutorials to start an interactive guide that will show you each part of the DVD Architect interface and teach you how to create projects.

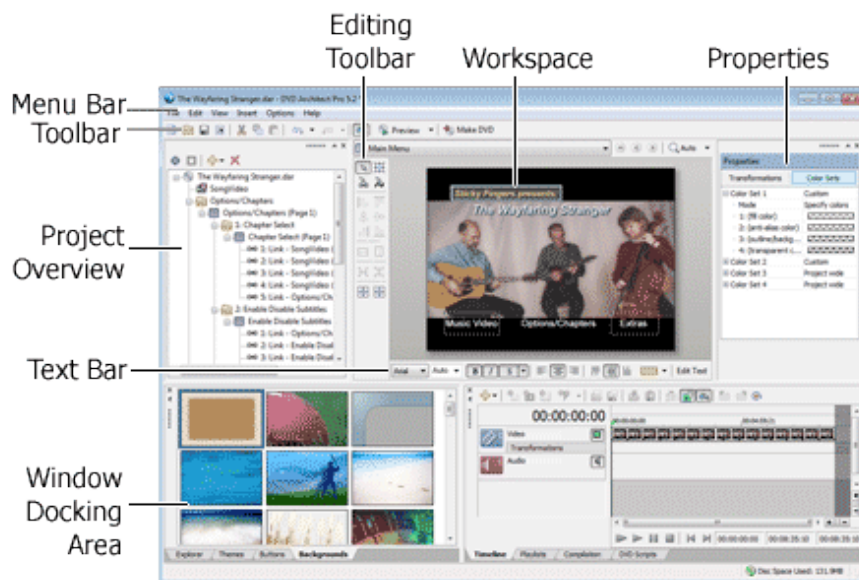
Choose a topic from the Interactive Tutorials overview to start a tutorial—you'll be up and running in no time!

The DVD Architect window

You can customize the DVD Architect™ Pro window to suit your editing needs. Use the View menu to show or hide portions of the window or click a portion's handle  and drag it away from its anchor point to create a floating window.

 The sections of the window can be sized to your preferences by dragging the dividers between them or by pressing F11:

- F11 minimizes and restores the docking area at the bottom of the window.
- Shift+F11 maximizes and restores the left and right docking areas (Project Overview and Properties windows).
- Ctrl+F11 minimizes and restores the window docking area, Project Overview, and properties windows.



 You can save and recall window layouts for your DVD Architect workspace. A window layout stores the sizes and positions of all windows and floating window docs in the workspace. You can store up to ten window layouts so you can quickly recall customized layouts for specific editing tasks. For more information, see ["Saving and recalling window layouts"](#) on page 271.

The menu bar

The DVD Architect menu bar is displayed at the top of the window and provides access to commands, options, online help, and Vegas Web pages.

The toolbar

From the View menu, choose Toolbar to show or hide the main DVD Architect toolbar. This toolbar allows you to quickly access the most commonly used functions and features.

To specify which buttons are displayed, choose Customize Toolbar from the Options menu. For more information, see "[Customizing the Toolbar](#)" on page 270.

Button	Description
 New Project	Creates a new project.
 Open Project	Opens an existing project.
 Save Project	Saves the current project.
 Properties	Opens the Project Properties dialog.
 Cut	Cuts selected events or time range.
 Copy	Copies selected events or time range.
 Paste	Pastes items from the clipboard into your project.
 Undo	Reverses the last command performed.
 Redo	Reverses an undo command.
 Enable Snapping	Enables snapping to grid lines.
 Preview	Shows or hides the Preview window.
 Make DVD	Opens the Make DVD wizard.
 Make Blu-ray Disc	Opens the Make Blu-ray Disc wizard.

The editing toolbar

From the View menu, choose Editing Toolbar to toggle the display of the editing toolbar along the left edge of the workspace. You can use the tools on the editing toolbar to select, arrange, and align objects on a menu.

When Enable Snapping is turned on, you can choose to have objects snap to the workspace grid, other objects, or safe areas. For more information, see "[Enable Snapping](#)" on page 176.

Button	Description
 Selection Tool	Use to select and move objects. When using the selection tool, objects and their associated text are grouped. You can move objects by dragging them on the workspace.

Button	Description
 Sizing Tool	Use to select, move, and resize objects. When using the sizing tool, you can select text boxes independently of their associated objects. You can move objects by dragging them or resize them by dragging the handles along their borders.
 Navigation Tool	Use to verify and edit which buttons will be activated when you press the Up, Down, Left, or Right buttons on the disc player remote control. For more information, see "The navigation tool" on page 181. You can also use the Button Properties controls to adjust button navigation. For more information, see "Button Properties" on page 44.  If you want to view navigation arrows even when the navigation tool is not selected, choose Workspace Overlays from the View menu, and then choose Show Navigation Overlay from the submenu.
 Keyframe Tool	Use to set position changes for your transformation keyframes in the workspace. For more information, see " The keyframe tool " on page 212.
 Align Left	Aligns all selected objects to the left edge of the last-selected object.
 Align Top	Aligns all selected objects to the top edge of the last-selected object.
 Align Horizontal Center	Aligns all selected objects to the horizontal center of the last-selected object.
 Align Vertical Center	Aligns all selected objects to the vertical center of the last-selected object.
 Align Right	Aligns all selected objects to the right edge of the last-selected object.
 Align Bottom	Aligns all selected objects to the bottom edge of the last-selected object.
 Make Same Width	Adjusts all selected objects so their width matches the object that has focus (the last object you selected).  If you resize an object in one direction only, the object will not resize if Maintain Aspect Ratio is set to Yes on the Transformations page of the Properties window because the image cannot be resized in one direction and still maintain its aspect ratio. You can turn off the Maintain Aspect Ratio setting or resize the object in both directions.

Button	Description
 Make Same Height	Adjusts all selected objects so their height matches the object that has focus (the last object you selected).  If you resize an object in one direction only, the object will not resize if Maintain Aspect Ratio is set to Yes on the Transformations page of the Properties window because the image cannot be resized in one direction and still maintain its aspect ratio. You can turn off the Maintain Aspect Ratio setting or resize the object in both directions.
 Space Across	Adjusts the selected items so an equal amount of horizontal space exists between objects. You must have three or more objects selected to use this button.
 Space Down	Adjusts the selected items so an equal amount of vertical space exists between objects. You must have three or more objects selected to use this button.
 Horizontal Centering	Moves the selected objects to the horizontal center of the screen.
 Vertical Centering	Moves the selected objects to the vertical center of the screen.

The workspace

From the View menu, choose Focus to Workspace to set editing focus to the workspace.

The workspace is the portion of the DVD Architect window where you design your project. The workspace represents the currently selected menu or title.



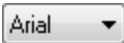
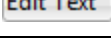
In addition to displaying the current menu or title, you can choose to display various overlays to help you design your project. To display or hide an overlay, choose Workspace Overlays from the View menu, and then choose an overlay from the submenu:

Item	Description
Show Title Safe Area	Display borders within the workspace to represent the visible areas for action and titles—the workspace displays the entire video frame, although most television monitors will not display all of this data. The outer border marks the area that will be visible on a television screen, and the inner border is the suggested area for titles.
Show Action Safe Area	After verifying that your action and titles are within the safe areas, however, you should test your project on the destination television monitor. You can adjust the safe area display using the Action safe area and Title safe area settings on the Editing tab in the Preferences dialog. For more information, see "Editing Preferences" on page 280.
Show Object Order	Displays numeric indicators to represent the layering of objects in a menu. Objects with lower numbers are displayed toward the bottom; objects with higher numbers are displayed toward the top. For example, if you select an object and move it to the top, it will obscure all other objects that are below it. For more information about editing object order, see "Editing object order" on page 183.
Show Grid	Displays a grid in the workspace to help you align items. From the Options menu, choose Grid Settings to adjust the grid. For more information, see "Grid Settings" on page 273.
Show Button Masks	Displays each button's mask image. To choose a button mask, use the Media controls in the Button Properties window. For information about creating custom masks, see "Creating Custom Masks" on page 244.
Show Navigation Overlay	Displays arrows that represent each button's destination for the Up, Down, Left, and Right buttons on the disc player remote. When this overlay is turned off, these arrows are displayed only when the navigation tool is selected.
Show Keyframe Overlay	Displays the position change paths for an item's transformation keyframes, if any have been applied. When this overlay is turned off, these paths are displayed only when the keyframe tool is selected.

 To browse a file's current location on your drive or network, right-click the file in the DVD Architect workspace or in a window in the window docking area and choose Explore Current Folder (or select the Video or Audio box in the Properties window, click the  button, and then choose Explore Containing Folder from the menu) to open the Windows Explorer.

The text bar

The text bar allows you to edit various properties for text objects you select in the workspace. To toggle the display of the text bar, choose Text Bar from the View menu.

Button	Description
	Font - Allows you to choose the typeface that will be used for text.
	Font Size - Allows you to choose the size (in points) of the typeface that will be used for text.
	Bold - Sets text in bold typeface.
	Italic - Sets text in italic typeface.
	Shadow - Allows you to select position, color, and blurring of a shadow behind text.
	Justify Left - Aligns text to the edge of text box.
	Justify Center - Aligns text in center of text box.
	Justify Right - Aligns text to right edge of text box.
	Justify Top - Aligns text to top edge of text box.
	Justify Vertical Center - Aligns text to vertical center of text box.
	Justify Bottom - Aligns text to bottom edge of text box.
	Font Foreground Color - Allows you to set foreground color for text.
	Edit Text - Makes selected text box editable.

For more information, see "[Adding and editing text](#)" on page 154.

Window docking area and floating window docks

You can dock (anchor) windows around the edges of the DVD Architect™ Pro window to keep frequently used windows available, but out of the way, while you are working with a project.

You can also create multiple floating docks to organize your DVD Architect windows. These docks can float over the DVD Architect window or – if you have a dual-monitor video card – on a secondary monitor.

- To dock a window, drag it to the docking area or a floating dock.
- To undock a window, click the handle  and drag it out of the docking area or floating dock.
- To expand a docked window so it fills the docking area, click the Maximize button . Click again to restore the window to its previous size.
- To remove a window from the docking area or a floating dock, click the Close button .

You can dock several windows in the same area of the screen, and the windows will be layered. Click a window's tab to bring it to the top. You can also save your window arrangement in the DVD Architect workspace to easily recall it later.

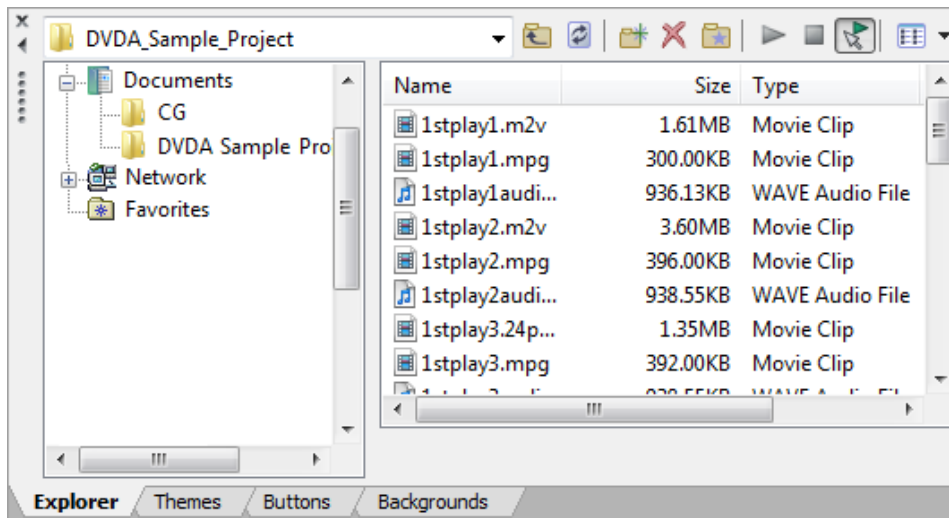


You can save and recall window layouts for your DVD Architect workspace. A window layout stores the sizes and positions of all windows and floating window docks in the workspace. You can store up to ten window layouts so you can quickly recall customized layouts for specific editing tasks. For more information, see "[Saving and recalling window layouts](#)" on page 271.

The Explorer window

From the View menu, choose Explorer to show or hide the Explorer window.

The Explorer window is similar to the Windows Explorer. Use the Explorer window to preview and select media files to drag to the workspace or Project Overview window. You can also use the Explorer to perform common file-management tasks such as creating folders, renaming files and folders, and deleting files and folders.



Learning more about the Explorer window

Button	Description
Up One Level	Opens the folder one level above the active folder.
Refresh	Refreshes the contents of the active folder. If you insert a CD or other removable media, click to refresh the Explorer.
Create New Folder	Creates a new folder within the active folder.
Delete	Deletes the selected folder or file.
Add to My Favorites	Adds the selected folder to the Favorites folder in the tree view. The Favorites folder contains links to folders that you use most often.
Start Preview	Plays the selected media file.
Stop Preview	Stops the playback of the selected media file.
Auto Preview	Automatically preview media files when you click them in the Explorer window.
Views	Allows you to change the way files are viewed in the Explorer window. ■ Tree View - Displays all of the available drives and folders you may choose from to find files. ■ Summary View - Displays a short description of the selected media file at the bottom of the Explorer window. ■ Details - Displays the file size, file type, and when the file was created or last modified. ■ All Files - Displays all file types in the active folder.

Previewing files

If the Auto Preview button  is selected, you can click a file in the Explorer to audition it. You can stop the preview by clicking the Stop Preview button  in the Explorer, or you can turn off the preview feature by deselecting the Auto Preview button.

When the Auto Preview button is not selected, click the Start Preview button  to start preview.

Using the Favorites folder

Select the Favorites folder in the tree view or choose Favorites from the address bar to view the contents of the Favorites folder. This folder contains shortcuts to folders that you use often.

 Favorites are saved in the C:\Users*User Name*\AppData\Roaming\Vegas\DVD Architect\6.0\ExplorerFavorites.txt. The file is saved whenever you close the Explorer window or exit the application. You can copy the file to different computers or user accounts to migrate Favorites settings.

To see this file, you must have the Show hidden files, folders, and drives radio button selected on the View tab of the Folder Options Control Panel.

Adding a folder to the Favorites folder

1. Browse to the folder you want to add.
2. Right-click the folder and choose Add Folder to My Favorites from the shortcut menu. A shortcut to the folder is added to the Favorites folder.

Removing a folder from the Favorites folder

1. Select the Favorites folder.
2. Right-click the folder you want to delete and choose Delete from the shortcut menu.

 Deleting a folder from Favorites deletes only the shortcut to the folder; the target folder is unaffected.

The Themes window

From the View menu, choose Themes to show or hide the Themes window.

Themes take the guesswork out of creating your project. By choosing a theme, you can quickly create a snazzy new DVD or Blu-ray Disc menu using predefined images and background music.

 Applying positional themes behaves slightly differently from applying grid-based themes. For more information about the differences between these types of themes, "[Exporting a Menu as a Theme](#)" on page 261.

Applying a theme

1. Choose the menu you want to edit:
 - Double-click a menu in the Project Overview window.
 - Click the down arrow in the address bar to select a menu.
2. Click the Back to Parent , Previous Page , and Next Page  buttons in the workspace to navigate your menus.
3. Select the Themes tab.
4. Double-click a theme to apply it to the selected menu or click the Apply Theme button .
 -  Select the Double-clicking themes applies them to all pages of a menu check box on the General tab of the Preferences dialog if you want to apply a theme to all pages in a menu. When the check box is cleared, the theme is applied to the current page only. For more information, see "[General Preferences](#)" on page 276.

Applying a theme's alignment to menu objects

You can automatically align menu objects when adding media to a menu.

Select the Double-clicking files in Explorer window reapplies theme layout check box on the General tab of the Preferences dialog if you want to automatically realign objects according to the current theme when you double-click media files in the Explorer. When you double-click a file, the new file is added, and the objects are realigned on the menu.

When the check box is cleared, the media files are added to the menu and existing object positions are preserved.

For more information, see "[General Preferences](#)" on page 276.

From the Edit menu, choose Reapply Theme Layout to realign objects at any time.

Deleting a theme

1. Select the Themes tab.
2. Select a theme in the Themes window.
3. Click the Delete Theme button .

 You cannot delete the default DVD Architect themes or themes that are currently in use in your project.

The Buttons window

From the View menu, choose Buttons to display the Buttons window. This window displays buttons that are available from installed themes and from your DVD Architect installation.

You can use the Buttons window to add new buttons to your menus, replace existing buttons, or remove frames from existing buttons.

 Only buttons from grid-based themes will be displayed in the Buttons window.

Creating a button

1. Double-click a menu in the Project Overview window (or navigate in the workspace) to open the menu you want to edit.
2. Select a button in the Buttons window.
3. Click the Create Button button  in the Buttons window. A button with no link is added to the menu.
4. Use the Button Properties controls to edit the action and appearance of the selected menu button. For more information, see "[Button Properties](#)" on page 44.

 When you add a button from the Buttons window, the new button's properties will match the settings specified by the button's original theme. Inherited properties include the following:

- Show image
- Show text
- Maintain aspect ratio (button image and text)
- Button size
- Button image and text size and position within the button rectangle
- Button text properties

Replacing a button

1. Double-click a menu in the Project Overview window (or navigate in the workspace) to open the menu you want to edit.
2. Select a button in the workspace.
3. Select a button in the Buttons window.
4. Click the Replace Button button  in the Buttons window. The selected button in the workspace is replaced with the selected button from the Buttons window. The button image, frame, and masks are also updated.

Removing the frame from a button

1. Double-click a menu in the Project Overview window (or navigate in the workspace) to open the menu you want to edit.
2. Select a button in the workspace.
3. Click the Remove Frame button . The frame is removed from the selected button.

Filtering the buttons displayed in the Buttons window

If you have many themes installed, the Buttons window can get cluttered. Use the controls at the top of the window to filter which buttons are displayed.

Item		Description
	Show Framed Buttons	Click to display only the buttons in the selected location that include a frame.
	Show Nonframed Buttons	Click to display only the buttons in the selected location that do not include a frame.
	Show All Buttons	Click to display all buttons in the selected location.
Button Source drop-down list		Choose a location from the drop-down list to display buttons from the selected collection or theme.

The Backgrounds window

From the View menu, choose Backgrounds to toggle the display of the Backgrounds window. This window displays menu backgrounds that are available from installed themes and from your DVD Architect installation.

You can use the Backgrounds window to add a background to a menu page or change an existing background.

Adding a background to a menu

1. Double-click a menu in the Project Overview window (or navigate in the workspace) to open the menu you want to edit.
2. Double-click a background in the Backgrounds window, or drag it to the workspace to replace the background in the current menu.

Using a background that includes button images

If you have a background that includes images that you want to use as buttons, you can apply the background and edit the button properties to achieve the effect.

1. Add your background to a menu.
2. Add links to your menu.
3. Use the selection tool  to drag the buttons over the images on the background that you want to use as buttons. You can use the sizing tool  to adjust the size of the button to fit over the image.
4. Select a button and click the  button next to the Button Properties heading in the Properties window to expand the Button Properties controls.
5. Click the  button next to the Graphics heading to expand the controls.

6. Select the Thumbnail control, and then click the  button to remove the thumbnail image.
7. Click the  button to remove the button mask and frame mask.
8. Select the Frame control, and then click the  button to remove the button frame.

The Compilation window

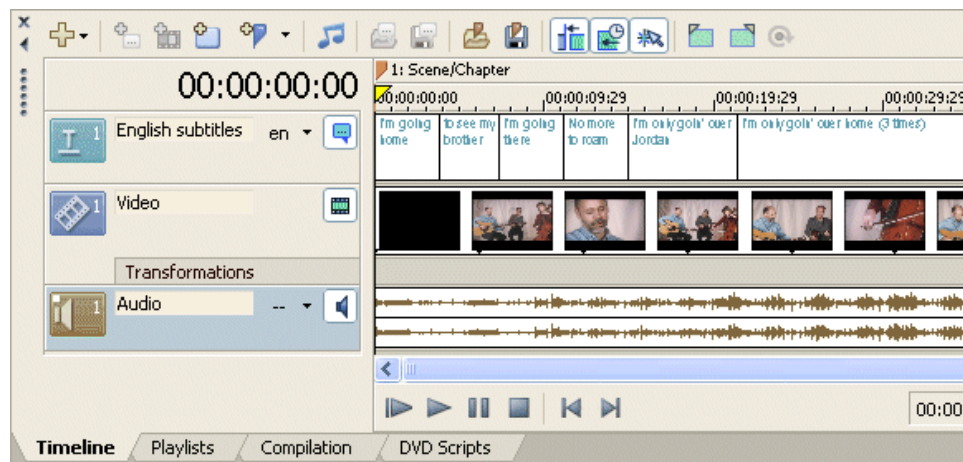
From the View menu, choose Compilation to show or hide the Compilation window.

Use the Compilation window to arrange slides in a picture compilation or songs in a music/video compilation, set image stretching or scaling, rotate an image, or set a picture's display duration.

For more information, see "[Picture compilations](#)" on page 192 and "[Music/video compilations](#)" on page 186.

The Timeline window

From the View menu, choose Timeline to display the Timeline window. The timeline is a chronological representation of a video, picture compilation, music/video compilation, or menu.



The timeline displays your main audio and video tracks, subtitle tracks, additional audio tracks, additional video tracks, markers, transformation keyframes, and transport controls you can use to preview your media within the DVD Architect workspace.

Setting the cursor position

The cursor position determines most of the behavior in the timeline: new subtitle events are created at the cursor position, chapter markers are added at the cursor position, and data is pasted at the cursor position when you paste tracks from music/video compilations, slides from picture compilations, or subtitle events.

To position the cursor, perform any of the following actions:

- Click in the timeline.
- Double-click the time display and type a timecode value to move the cursor to that position.
- Press the Left Arrow or Right Arrow keys to move the cursor along the timeline (hold Alt while pressing Left/Right Arrow to move one frame).
- Click the Go to In Point  or Go to Out Point  button to move the cursor to the specified in and out points. For more information on in and out points, see the heading below in this topic.

Setting a button's thumbnail image

You can easily set a button's thumbnail image using a specific frame in the media file:

1. Double-click the title's icon in the Project Overview window.
2. Click in the timeline window to position the cursor on the frame you want to use as a thumbnail image.
3. Right-click the title's icon in the Project Overview window and choose Set Thumbnail from View from the shortcut menu.

Setting in and out points for video titles

If you don't want to burn the complete media file to your disc, you can set new in and out points to trim your media.

1. Double-click title in the Project Overview window (or navigate in the workspace) to open the title you want to edit.
2. Position the cursor where you want to start your movie and click the Set In Point button  or drag the in point  in the time ruler.

Chapter 1 represents the point at which playback will begin. When you change the in point, the first chapter marker will be updated to match the in point.
3. Position the cursor where you want to end your movie and click the Set Out Point button  or drag the out point  in the time ruler.

Quantizing to frames

Select the Quantize to Frames button  to force edits in the Timeline window to occur on frame boundaries.

When Quantize to Frames is turned on, the following actions will always occur on frame boundaries:

- Moving subtitle events
- Positioning the cursor
- Placing markers and regions

Learning about marker types

You can insert scene/chapter markers, chapter markers and buttons-on-video markers in video files.

You can also rename, move, delete, load and save markers. Please see the following headings in this topic for more information on performing marker tasks.

Notes:

- Markers must be at least one second apart.
- A DVD project can contain a maximum of 99 chapters and 255 markers per title.
- A Blu-ray Disc project can contain a maximum of 999 chapters per title.
- In a music/video compilation, markers always occur at the beginning of the compilation and between items. These markers cannot be moved or deleted.

Scene/chapter markers

Scene/chapter markers are used when you add scene selection menus to your projects.

Using the Timeline window, you can place scene/chapter markers in your video file for viewers to use as navigation points. The scene/chapter markers allow you to move to certain portions of the video and begin playback. You can also use scene/chapter markers to link to a point in a video using end actions or to automatically create scene selection menus using the Insert > Scene Selection command.

For more information, see "[Adding a scene selection menu](#)" on page 157.

Chapter markers

Chapter markers are used to denote different sections of your project. You can place chapter markers in your video file for viewers to use as navigation points to skip through the project. Chapter markers are ignored when you create scene selection menus using the Insert > Scene Selection command, but you can use chapter markers to manually create scene selection menus or link to a point in a video using end actions.

For more information, see "[Adding a scene selection menu](#)" on page 157.

Buttons-on-video markers

When you add buttons to a video, the button regions in the timeline must be placed between two markers. Buttons-on-video markers allow you to create markers that can be used to place button regions.

Unlike scene/chapter markers and chapter markers, buttons-on-video markers are ignored by the remote control's previous/next chapter buttons. When you add a button to a video, a button region is created in the Timeline window. Buttons-on-video markers can be moved so you can easily adjust the length of your button regions.

For more information, see "[Adding buttons to video](#)" on page 177.

Inserting markers

1. Double-click a title in the Project Overview window (or navigate in the workspace) to open the

title you want to edit.

2. In the Timeline window, click to position the cursor where you want to add a marker.
3. Click the down arrow  next to the Insert Marker button  and choose the type of marker you want to insert (scene/chapter, chapter, or buttons-on-video).

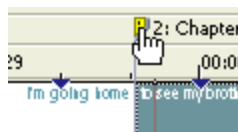
 See the previous heading in this topic for more information on marker types.

Snapping markers to I-frames

For DVD-compliant video files, markers must occur at I-frames. If a marker does not occur at an I-frame, the  tag will appear. To snap the marker to the I-frame, drag the marker along the timeline to one of the I-frame reference points .

 Notes:

- This feature is not applicable to Blu-ray Disc projects—markers do not need to occur at I-frames in Blu-ray Disc projects.
- I-frame reference points will appear on the timeline once you begin to drag the marker.



When the marker has snapped to the I-frame, the tag will clear from the marker.

- If a marker is not an I-frame, you can recompress the video title to add an I-frame at that location on the timeline. However, if you don't manually recompress the title, DVD Architect will automatically move the marker to an I-frame. For more information on recompressing video titles, see "[Optimizing your project](#)" on page 119.

Moving markers

To move a marker, drag the marker tab  to a new position.

 In a music/video compilation, markers always occur at the beginning of the compilation and between items. These markers cannot be moved or deleted.

Renaming markers

Assigning unique names to markers can help you identify them quickly.

1. Right-click the marker tab  and choose Rename Marker from the shortcut menu.

 This option is not available for music/video compilations or picture compilations.

2. Type a new name in the edit box.
3. Press Enter.

Deleting markers

Right-click the marker tab  and choose Delete Marker from the shortcut menu.



This option is not available for music/video compilations or picture compilations. In a music/video compilation or picture compilation, markers always occur at the beginning of the compilation and between items. These markers cannot be moved or deleted.

Loading markers from a file

Click the Load Markers button  to clear existing markers and reload any marker changes you made in the file with a video editor such as Vegas Pro software.



This button is not available for music/video compilations or picture compilations. In a music/video compilation or picture compilation, markers always occur at the beginning of the compilation and between items. These markers cannot be moved or deleted.

Saving markers

Click the Save Markers button  to save markers to the media file.

If you do not save the markers, marker positions are saved with your DVD Architect project file, but not in the media file.



Notes:

- This button is not available for music/video compilations or picture compilations.
- DVD Architect saves the marker location but not the marker type. When you load markers, all will be imported as Scene/Chapter markers.

Linking titles to chapter markers

You can link the end action of a button, music/video compilation, picture compilation, playlist, media file, or script to a chapter marker in a media file.

1. Select the title you want to link to a chapter.
2. Click the End Action button in the Properties window.
3. Select the Command box, click the down arrow button , and choose Link.
4. In the Destination Chapter drop-down list, select the chapter marker to which you want to link.

Inserting transformation keyframes

You can use transformation keyframes in the Timeline window to change the size and position of a video or graphic over time, creating an animated effect. For more information on transformation keyframes and adding them to your project, see "[Transformation keyframes](#)" on page 206.

Previewing your project in the workspace

The transport controls in the Timeline window allow you to preview the current menu or title in the workspace.

Select the Activate Track button  in a subtitle track header and the Activate Track button  in an audio track header to determine which tracks are played when you preview your project.

Item		Description
Play from In Point		Starts playback from the in point, leaving the cursor at its current position.
Play		Starts playback of the menu or title from the current cursor position.
Pause		Stops playback and leaves the cursor where it is.
Stop		Stops playback and brings the cursor back to its starting position.

The Project Overview window

From the View menu, choose Project Overview to show or hide the Project Overview window.

The Project Overview window provides a hierarchical view of the menus and titles in your project.

Showing end actions

Select the Toggle Display of End Actions button  to display each menu or object's end action as a child item in the Project Overview window.

You can click the expand button  to expand the lists and show individual end actions or click the collapse button  to hide them.

You can use the Properties window to edit and format the new object's settings. For more information, see "[The Properties window](#)" on page 42.

Deleting a menu or title

Select an object in the list and click the Delete Object button  to remove it from your project.

Setting the disc start item

The start item is the item that plays by default when your disc is played in a DVD or Blu-ray Disc player. In a menu-based project, for example, the main menu is typically your start item.

 If you have designated a DVD start script, the script will execute prior to the DVD start item you set. Scripting is not available for Blu-ray Disc projects. For more information, see "[Using scripting](#)" on page 216.

Use the Set Disc Start button  in the Project Overview window to assign an item from your project as the disc start item.

1. Select an object in the Project Overview window.
2. Click the Set Disc Start button .

The start item is displayed as a  if it is an object and as a  if it is a menu.

Adding the introduction (first play) media

Use the Insert Introduction Media option to add a media file to your project and set it as your disc start item.

You could use introduction media to add copyright information or a corporate logo that is displayed before your disc starts playing.

1. Select an object in the Project Overview window.
2. Click the Insert Object button  and choose Introduction Media from the menu. The Insert Media dialog is displayed.
3. In the Insert Media dialog, select the media file you want to use and then click Open.

The file you selected is set as the disc start item, and the previous disc start item is added to the new media file as an end action link. For more information, see "[Media Properties](#)" on page 67.

The start item is displayed as a  in the Project Overview window.

Adding a menu or title

1. Click the Insert Object button  and choose an option from the menu:
 - Click Menu to add a new, blank menu to your project. For more information, see "[Adding a submenu](#)" on page 148.
 - Click Picture Compilation to create a picture compilation. For more information, see "[Picture compilations](#)" on page 192.
 - Click Music/Video Compilation to create a music or video compilation. For more information, see "[Music/video compilations](#)" on page 186.
 - Click Media to add a media file to your project. You can add a video or any other supported media file. For more information, see "[Single-movie discs and titles](#)" on page 202.
2. If a menu is selected, an object link is added to the selected menu. If the root of your project is selected, the item is added to your project without creating object links.

You can use the Properties window to edit and format the new menu or title's settings. For more information, see "[The Properties window](#)" on page 42.



Drag a file from the Explorer window (or Windows Explorer) to the root folder in the Project Overview window. Dragging a file to the root folder adds the media to your project without creating a button on a menu.

You can use this unassociated media as a transition between menus via end actions or as a destination for button actions or the Menu button on the remote control. For more information, see "[The Properties window](#)" on page 42.

Adding a scene selection menu

1. Select a title in the Project Overview window.
2. From the Insert menu, choose Scene Selection Menu to create a scene selection menu for the title. For more information, see "[Adding a scene selection menu](#)" on page 157.

Adding a playlist

Click the Insert Object button  and choose Playlist from the menu to add a playlist to your project. For more information, see "[Playlists](#)" on page 198.

Adding a DVD script

Click the Insert Object button  and choose DVD Script from the menu to add a script to your project. For more information, see "[Using scripting](#)" on page 216.



Scripting is not available for Blu-ray Disc projects.

Renaming a menu or title

Right-click an item in the Project Overview window and choose Rename from the shortcut menu (or press F2) and type a new name to change the name of an item.



Menu pages cannot be named independently of menus. To rename a menu, select a menu  instead of a page  before choosing Rename.

Setting a button's thumbnail image

You can easily set a button's thumbnail image using a specific frame in the media file:

1. Double-click the title's icon in the Project Overview window.
2. Click in the Timeline window to position the cursor on the frame you want to use as a thumbnail image.
3. Right-click the title's icon in the Project Overview window and choose Set Thumbnail from View from the shortcut menu.

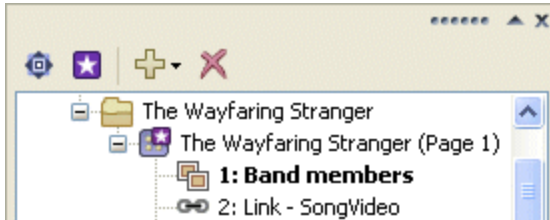
Setting a menu's default button

A menu's default button is automatically selected when a menu is displayed. In the Project Overview

window, a menu's first button is used as the default selected button.

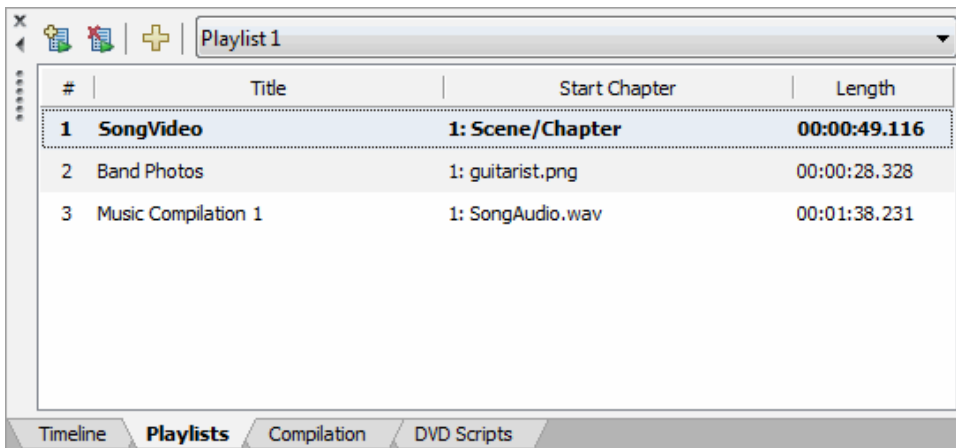
You can override the default button by specifying a destination button in the Button Properties, Media Properties, Music/Video Compilation Properties, and Picture Compilation Properties controls. For more information, see "[The Properties window](#)" on page 42.

You can drag titles in the Project Overview window to change the default button. In the following example, the "Band Members" button is the default button on the "The Wayfaring Stranger" menu.



The Playlists window

From the View menu, choose Playlists to display the Playlists window. This window allows you to insert a playlist, review and edit playlist items, and delete a playlist.



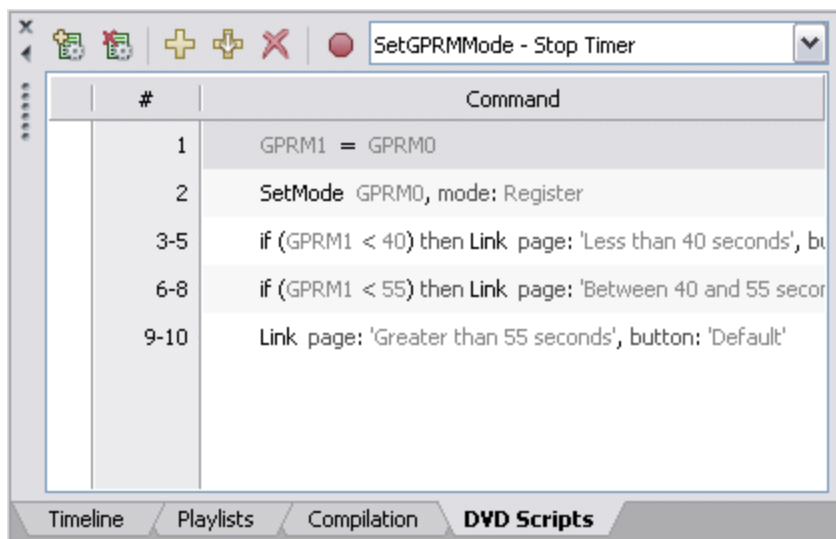
Item	Description	
	Insert Playlist	Click to add a new playlist to your project. For more information about creating playlists, see " Playlists " on page 198.
	Delete Playlist	Click to remove the current playlist from your project.
	Insert Playlist Items	Click to display the Select Titles dialog, where you can add titles to the current playlist.  You can also drag titles from the Project Overview window to the Playlists window.
Current playlist	Choose a playlist from the drop-down list to choose the playlist you want to display.	

Item	Description
Playlist item list	Lists the titles in the playlist. You can drag titles within this area to rearrange them. You can use the Playlist Properties controls to set the starting chapter, audio track, subtitle track, and video track for each item. For more information, see " Playlist Properties " on page 88.

The DVD Scripts window

From the View menu, choose DVD Scripts to display the DVD Scripts window. This window allows you to insert a script, review and edit statements in your script, toggle the breakpoint, and delete a script.

 Scripting is not available for Blu-ray Disc projects.



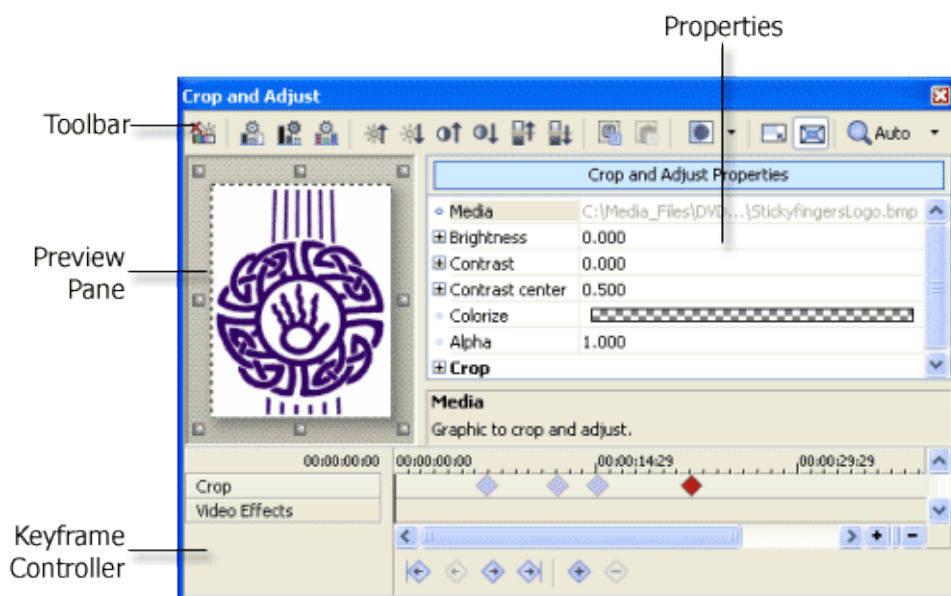
Item	Description
	Insert DVD Script Click to add a new DVD script to your project. For more information about creating DVD scripts, see " Using scripting " on page 216.
	Delete DVD Script Click to remove the current script from your project.
	Insert Statement Click to add a statement to your script. The Script Properties information is displayed in the Properties window, allowing you to choose your statement type and construct your statement. For more information, see " Script Properties " on page 91.
	Append Statement Click to add a statement to the end of your script. The Script Properties information is displayed, allowing you to choose your statement type and construct your statement.
	Delete Statement Click to remove the selected statement(s) from your script.

Item	Description
 Toggle Breakpoint	Click to insert a breakpoint to the currently selected command(s) or label(s) in the script.
DVD scripts list	Choose an existing script from the drop-down list to specify the script you want to display.
Script statement list	Lists the statements in the script. You can drag statements within this area to rearrange them. You can use the Script Properties controls to set the statement type, commands, and conditions. For more information, see " Script Properties " on page 91.

The Crop and Adjust window

From the View menu, choose Crop and Adjust to display or hide the Crop and Adjust window. You can also right-click a graphic in the workspace and choose Crop and Adjust from the shortcut menu (or select the Video box in the Properties window, click the down arrow button , and then choose Crop and Adjust from the menu).

Use the Crop and Adjust window to crop a video or graphic or adjust its appearance. You can set these changes to occur over time through the use of keyframes in the Keyframe Controller at the bottom of the window. The window includes a preview pane so you can monitor your progress and compare the processed and unprocessed image.



Using the toolbar

You can use the buttons on the toolbar to make quick adjustments to a video or image. You can use the preview pane in the Crop and Adjust window to preview your adjustments.

 Expand the Brightness, Contrast, and Contrast center controls on the right side of the dialog to see the results of your adjustments.

Item	Description
 Reset Effect Properties	Click to remove all effects from the media.
 Auto Levels	Click to automatically adjust the brightness and contrast based on contents of the selection box. The most abundant colors (either light or dark) are enhanced. Auto levels is intended to be used on still images, but can also be used for video. When you use the effect on video, be aware that the setting will be determined by a single frame. Before opening the Crop and Adjust dialog, select a frame in the Timeline window to choose a frame that is representative of the video.
 Auto Levels (Dark)	Click to automatically adjust the brightness and contrast based on the contents of the selection box. The least abundant colors (either light or dark) are enhanced.
 Auto Level Channels	Click to automatically adjust brightness and contrast based on the contents of the selection box. Adjustment is performed independently on each color channel.
 Increase Brightness	Click to increase or decrease the brightness of the image.
 Decrease Brightness	
 Increase Contrast	Click to increase or decrease the contrast of the image.
 Decrease Contrast	
 Increase Contrast Center	Click to adjust the anchor point around which contrast is adjusted.
 Decrease Contrast Center	
 Copy Crop Rectangle to Clipboard	Click to copy the current selection to the clipboard and paste the selection from the clipboard. You can use these buttons when you want to crop multiple images to the same dimensions.
 Paste Crop Rectangle from Clipboard	
 Bypass Effects on Regions	Creates a split-screen preview that bypasses all video effects without removing them from your media. Click the down arrow button  next to the Bypass Effects on Regions button  and choose a setting from the menu to choose which portion of the preview pane will display bypassed effects.

Item	Description
 Lock Aspect Ratio	Click if you want the selection box to retain its aspect ratio during resizing. When this button is not selected, the height and width can be resized independently.  Press Ctrl at any time to override these settings.
 Size About Center	Click if you want the selection box to retain its center point when you resize the box by dragging its edges. When the button is not selected, the opposite side of the selection box will remain anchored when you drag the edges to resize it.  Press Alt at any time to override these settings.
 Zoom settings	Click to choose the magnification of the image in the Crop and Adjust dialog. When Auto is selected, the image will zoom to fit the current window size.

Adjusting a graphic's appearance

You can use the Crop and Adjust Properties controls on the right side of the Crop and Adjust dialog to specify settings for adjusting an image's appearance or cropping.

Item	Description
Media	Displays the location and file name of the currently selected media file.
Brightness	Use the Brightness controls to adjust the brightness of the image. ■ Select the Brightness box, click the down arrow button , and drag the slider (or type a value in the box) to adjust the overall brightness of the image. ■ Click the expand button  next to the Brightness box to display individual controls for the red, green, and blue channels in the image. Select the Red, Green, or Blue box, click the down arrow button , and drag the slider (or type a value in the box) to adjust the brightness of an individual color channel.

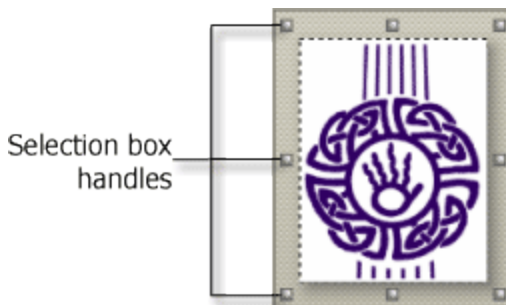
Item	Description
Contrast	Use the Contrast controls to adjust the contrast of the image: ■ Select the Contrast box, click the down arrow button , and drag the slider (or type a value in the box) to adjust the overall contrast of the image. ■ Click the expand button  next to the Contrast box to display individual controls for the red, green, and blue channels in the image. Select the Red, Green, or Blue box, click the down arrow button , and drag the slider (or type a value in the box) to adjust the contrast of an individual color channel.
Contrast center	Use the Contrast center controls to set the anchor point around which contrast is adjusted: ■ Select the Contrast center box, click the down arrow button , and drag the slider (or type a value in the box) to adjust the overall contrast of the image. ■ Click the expand button  next to the Contrast center box to display individual controls for the red, green, and blue channels in the image. Select the Red, Green, or Blue box, click the down arrow button , and drag the slider (or type a value in the box) to adjust the contrast center of an individual color channel.
Colorize	Use the Colorize controls to add a color tint to the image: 1. Select the Colorize box and click the down arrow button  to display a color picker. 2. Edit the selected color by performing any of the following actions: ■ Drag the R, G, and B sliders to choose a color, and drag the vertical alpha slider to set transparency. ■ Type values in the R, G, B, and A boxes. ■ Select the eyedropper tool to sample a color from your screen. ■ Click the Change color space button  to switch between RGB and HSL color modes.  When you're using the color picker, a warning icon  is displayed when you choose an out-of-gamut color. Click the color swatch below the warning to correct the color.

Item	Description
Alpha	Select the box, click the down arrow button  , and drag the slider (or type a value in the box) to adjust the transparency of the image: drag left to increase transparency, or drag right to make the image more opaque.
Crop	Use the Crop controls to add a crop to the edges of the graphic to frame the image: ■ Select the Left box, click the down arrow button , and drag the slider (or type a value in the box) to trim the left edge of the image. ■ Drag the Top slider (or type a value in the box) to trim the top edge of the image. ■ Drag the Right slider (or type a value in the box) to trim the right edge of the image. ■ Drag the Bottom slider (or type a value in the box) to trim the bottom edge of the image.

Cropping a graphic

Perform either of the following procedures to crop a video or image:

Drag the handles on the selection box in the preview pane to adjust its size, or drag from the center of the box to change its position. The selection box represents the portion of the image that will be visible.



Tips:

- Click the Lock Aspect Ratio button  if you want the selection box to retain its aspect ratio during resizing.
- Right-click the selection box and choose Match Output Aspect to force the height:width ratio of the selection box to match the Video format setting in your Project Properties. For more information, see "[Setting project properties](#)" on page 106.

-or-

1. Click the expand button  next to the Crop box to expand the controls.
2. Use the Crop controls to add a crop to the edges of the graphic to frame the image:
 - a. Select the Left box, click the down arrow button , and drag the slider (or type a value in the box) to trim the left edge of the image.
 - b. Drag the Top slider (or type a value in the box) to trim the top edge of the image.
 - c. Drag the Right slider (or type a value in the box) to trim the right edge of the image.
 - d. Drag the Bottom slider (or type a value in the box) to trim the bottom edge of the image.

Adding keyframes

Use the Keyframe Controller at the bottom of the Crop and Adjust dialog to insert and edit crop or video effect keyframes. Keyframes allow you to animate your video or graphic by adjusting the settings over time. For more information on adding keyframes, see "[Crop and video effects keyframes](#)" on page 204.

Saving and recalling window layouts

A window layout stores the sizes and positions of all windows and floating window docks in the DVD Architect workspace.

You can store any number of window layouts on your computer, and up to ten window layouts are available in the View menu (and via keyboard shortcuts) so you can quickly recall frequently used layouts.



Window layouts are saved in the folders listed below. You can transfer layouts between computers by copying the .DVDArchWindowLayout files.

- Windows XP: C:\Documents and Settings\Your Username\Application Data\Vegas\DVD Architect\6.0
- Windows Vista or Windows 7: C:\Users\Your Username\AppData\Roaming\Vegas\DVD Architect\6.0

Saving a window layout

1. Arrange the windows and docked windows as desired.
 Press Ctrl+Alt+D, release the keys, and then press a number on your keyboard (not the numeric keypad) to save the layout in that space.
2. From the View menu, choose Window Layouts, and then choose Save Layout As from the submenu. The Save Layout As dialog is displayed.

Choose Save Layout from the submenu if you want to update the current window layout. A bullet (●) is displayed next to the current layout.

3. In the Name box, type the name you want to use to identify the layout. This name will be used in the Organize Layouts dialog.
4. Choose a setting from the Shortcut drop-down list to set the shortcut that will be used to load the layout.

For example, if you choose 4, you could press Alt+D, release the keys, and then press 4 on your keyboard to load the layout.

5. The Folder box displays the path to the folder where the layout will be saved.

Window layouts are saved in the folders listed below by default. You can click the Browse button to choose a different folder.

- Windows XP: C:\Documents and Settings\Your Username\Application Data\Vegas\DVD Architect\6.0
- Windows Vista or Windows 7: C:\Users\Your Username\AppData\Roaming\Vegas\DVD Architect\6.0

6. Click OK to save the new layout.

Loading a saved layout

From the View menu, choose Window Layouts, and then choose the window layout you want to use from the submenu.



To load a layout quickly, press Alt+D, release the keys, and then press a number on your keyboard (not the numeric keypad) to recall the layout saved in that in that space. If no layout is saved in that space, nothing will happen when you press the shortcut.

If you've modified the current window layout, choose Window Layouts, and then choose Reload Selected Layout from the submenu to reset the window layout to the last-saved version.

Adding a layout to the View > Window Layouts submenu

1. From the View menu, choose Window Layouts, and then choose Organize Layouts from the submenu. The Organize Layouts dialog is displayed.

2. Select a layout in the Available layouts in current folder box.

This box lists the .DVDArchWindowLayout files in the folder displayed in the Current layout folder box. If the layout you want to use is saved in a different folder, you can click the Browse button to choose a new folder.

3. Select a layout in the Current layouts in menu box.
4. Click the Assign (or Replace) button—or double-click a layout in the Available layouts in current folder box — to add the layout to the View > Window Layouts submenu.

You can click the Move Up or Move Down buttons to change the order of the layouts in the menu.

5. Click the Activate button – or double-click a layout in the Current layouts in menu box – to apply the selected layout to the DVD Architect workspace.
6. Click OK to close the Organize Layouts dialog and apply your changes.

Removing a layout from the View > Window Layouts submenu

1. From the View menu, choose Window Layouts, and then choose Organize Layouts from the submenu. The Organize Layouts dialog is displayed.
2. Select a layout in the Current layouts in menu box.
3. Click the Clear button to remove the selected layout from the View > Window Layouts submenu.

If you want to replace the selected layout, select a layout in the Available layouts in current folder box and click the Replace button.

4. Click OK to close the Organize Layouts dialog and apply your changes.



Removing a layout from the View > Window Layouts submenu does not remove the .DVDArchWindowLayout file from your computer.

Deleting a layout from your computer

1. From the View menu, choose Window Layouts, and then choose Organize Layouts from the submenu. The Organize Layouts dialog is displayed.
2. Select a layout in the Available layouts in current folder box.
3. Click the Delete Layout button to remove the selected layout from your computer.



You cannot delete a layout that is included in the Current layouts in menu list. First, select the layout in the Current layouts in menu list and click the Clear button. Next, select the layout in the Available layouts in current folder list and click the Delete Layout button.

4. Click OK to close the Organize Layouts dialog and apply your changes.

The Properties window

From the View menu, choose Properties to show or hide the Properties window.

The Properties window gives you total control over menu and object settings in DVD Architect™ Pro software.



The contents of the Properties window will vary depending on the current selection: if you have a graphical element selected in the workspace, Graphics Properties are displayed; if you have a music/video compilation selected, Music/Video Compilation Properties are selected; and so on.

Graphics Properties

You can use the Graphics Properties pane in the Properties window to edit the position, size, and appearance of graphical elements on a menu or compilation.

To edit a graphic's properties, perform the following actions:

1. If the window isn't already visible, choose Properties from the View menu.
2. Select a graphic with the selection , sizing , or navigation  tool.
3. Select a button at the top of the Properties window.

For more information about adding graphics to menus and compilations, see "[Adding graphics to a menu or compilation](#)" on page 151.

Transformations

Item	Description
X position	Edit the X position and Y position values to change the center of the selected graphic's position. These coordinates are based on the frame size of your project. For example, if you're creating an NTSC (720x480) project, (0,0) is the top-left corner of the frame, and (720,480) is the lower-right corner. ■ Select the number and type a new value. ■ Use the spin controls to adjust the value. ■ Select the value and click the down arrow button  to display a slider that you can use to adjust the value.
Y position	

Item	Description
X size Y size	Edit the X size and Y size values to change the size of the selected graphic. ■ Select the number and type a new value. ■ Use the spin controls to adjust the value. ■ Select the value and click the down arrow button  to display a slider that you can use to adjust the value.
Maintain aspect ratio	Select the Maintain aspect ratio box, click the down arrow button , and choose Yes from the drop-down list if you do not want an image to be stretched when you change the height or width.
Show before loop point	Specifies whether the selected item displays before the menu's specified loop point.

Media

The controls on the Media page determine the image displayed for a graphical element and adjust its appearance.

You can use still images or video files as graphics. If you use a video file, you can choose to display a static frame, or you can animate the graphic by playing the video.

Item	Description
Object Media	Displays the path to the current media file. Select the control and click the down arrow button  to display a menu, where you can choose a file, view media properties, crop and adjust media settings, remove the current file, or open it in a graphics editor.  To change a file quickly, drag a file from the Explorer window to the Object Media box.
Start time	Select the Start time box, click the down arrow button , and drag the slider (or type a value in the box) to indicate which frame is displayed (for a still image) or the frame at which playback will begin (for an animated graphic).
Style	Select the Style box, click the down arrow button , and choose a command from the menu to indicate whether you want to display a still image or animated graphic.

Color Sets

Color sets determine which colors are used to indicate selected, activated, and inactive buttons on your menu page.

You can have four project-wide color sets that are available to every menu page in your project, and each menu page in your project can also have up to four custom color sets with four colors each. Each color set includes a fill color, outline/background color, anti-alias color, and transparent color.

Use the Color Sets page to edit the color sets that will be available for the selected menu, and then use the General page in the Menu Page Properties pane to choose which color sets are used for the selected, activated, and inactive buttons on your menu. For more information, see "[Menu Page Properties](#)" on page 55.

For more information about working with color sets, see "[Using color sets](#)" on page 161.

Button Properties

You can use the Button Properties pane in the Properties window to edit the action and appearance of the selected menu button.



The color sets used to indicate selected, activated, or inactive, buttons are assigned on the General page of the in the Menu Page Properties controls. For more information, see "[Menu Page Properties](#)" on page 55.

To edit a button's properties, perform the following actions:

1. If the window isn't already visible, choose Properties from the View menu.
2. Double-click a menu in the Project Overview window (or navigate in the workspace) to open the menu you want to edit.
3. Select a button in the workspace with the selection , sizing , or navigation  tool.
4. Click a button at the top of the Properties window.



Tips:

- You can use button actions to create setup menus similar to those found on commercially produced discs. For more information, see "[Adding a setup menu](#)" on page 159.
- Use the Buttons window to add new buttons to your menus, replace existing buttons, or remove frames from existing buttons. For more information, see "[The Buttons window](#)" on page 21.
- To view button masks in the workspace, choose Workspace Overlays from the View menu, and then choose Show Button Masks from the submenu (or press Ctrl+B).

Transformations

Item	Description
X position Y position	Edit the X position and Y position values to change the center of the selected button's position. These coordinates are based on the frame size of your project. For example, if you're creating an NTSC (720x480) project, (0,0) is the top-left corner of the frame, and (720,480) is the lower-right corner. ■ Select the number and type a new value. ■ Use the spin controls to adjust the value. ■ Select the value and click the down arrow button  to display a slider that you can use to adjust the value.
X size Y size	Edit the X size and Y size values to change the size of the selected button. ■ Select the number and type a new value. ■ Use the spin controls to adjust the value. ■ Select the value and click the down arrow button  to display a slider that you can use to adjust the value.
Maintain aspect ratio	Select the Maintain aspect ratio box, click the down arrow button , and choose Yes from the drop-down list if you do not want the button image to be stretched when you change the height or width.
Show before loop point	Select the Show before loop point box, click the down arrow button , and choose Yes from the drop-down list if you want the button to be displayed before a menu's loop point. By default, buttons are not displayed before playback reaches the set loop point.

Action

The controls on the Action page determine what happens when a user selects a button on your menu.



Use the Set audio track and Set subtitle track controls to create language-selection menus.

Item	Description
Command	Determines the button's behavior: ■ Link - You can link to any menu, media file, and chapter point. Use the Destination and Destination chapter, Destination item, or Destination button controls to set the target. ■ Stop - The button will halt playback of the current title. ■ Resume - The button will resume playback of the current title from the point when a Menu button was selected. If the title specified in the Destination control is not the last title played, playback will begin at the start.
Destination	When Link is selected in the Command drop-down list, choose the menu, title, playlist, or DVD script that will be displayed when the button is activated. When Resume is selected in the Command drop-down list, choose the video, picture compilation, or music/video compilation that will resume playback when the button is activated.  Scripting is not available for Blu-ray Disc projects.
Destination chapter Destination item	When your button links to a video, music/video compilation, picture compilation, or playlist, choose the specific chapter that will be displayed. When your button links to a menu, choose Start or Loop Point to indicate the point from which the menu will be played. For more information about setting a menu loop point, see "Setting looping points for menus" on page 156.
Destination button	When your button links to a menu, choose the button you want to use as the default selected button in the destination menu. If you choose Default, the first button listed under the menu in the Project Overview window is used as the default.

Item	Description
Set audio track	Choose a setting from the drop-down list to choose which audio track will be played in a destination title. Choose No change to use the last-set track.  If you use the Set audio track control to change the audio track, the new track will be used when you navigate between titles unless another button action, end action, or user action (via the remote control) changes the track. When setting up your project, we recommend using the same track sequence for all videos, picture compilations, and music/video compilations. If necessary, insert empty audio tracks to maintain the track sequence so that the disc will continue to play the same track number when you transition playback between titles. For more information about adding audio tracks, see "Adding audio tracks" on page 132.
Set subtitle track	Choose a setting from the drop-down list to choose which subtitle track will be played in a destination title. Choose Off to turn subtitles off, or choose No change to use the last-set track.  If you use the Set subtitle track control to change the subtitle track, the new track will be used when you navigate between titles unless another button action, end action, or user action (via the remote control) changes the track. When setting up your project, we recommend using the same track sequence for all videos, picture compilations, and music/video compilations. If necessary, insert empty subtitle tracks to maintain the track sequence so that the disc will continue to play the same track number when you transition playback between titles. For more information about adding subtitle tracks, see "Adding subtitles" on page 137.
Set video angle	Choose a setting from the drop-down list to choose which video track will be played in a destination title. Choose No change to use the last-set track.  If you use the Set video angle control to change the video track, the new track will be used when you navigate between titles unless another button action, end action, or user action (via the remote control) changes the track.

Item	Description
Auto activate	Choose Yes or No from the drop-down list to indicate whether you want the button action to be performed automatically when the button is selected: ■ When Yes is selected, the user doesn't need to press the Enter button on the DVD or Blu-ray Disc remote control. ■ When No is selected, the user will select a button with the arrow buttons on the DVD or Blu-ray Disc remote control and then press Enter to activate it.

Media

The controls on the Media page determine the image and mask files used to display buttons and adjust the appearance of the images.

You can use still images or video files as thumbnails. If you use a video file, you can choose to display a static image, or you can animate the button by playing the video.

Item	Description
Button style	Select the box, click the down arrow button , and choose a command from the drop-down list to determine how the button is displayed on your menu: ■ Text only - The button is displayed as a text-only link. ■ Image only - The button is displayed as a graphical button only. ■ Text and image - The button is displayed as a graphical button with a text label.

Item	Description
Thumbnail Media	Displays the path to the current thumbnail file. Select the control and click the down arrow button  to display a menu, where you can choose a file, view Media Properties, crop and adjust media settings, remove the current file, open the file in your selected graphics editor, or explore the file's containing folder on your drive.  Tips: ■ To change a file quickly, drag a file from the Explorer window to the Thumbnail Media box. ■ Click to position the cursor on a specific frame in the Timeline window, right click the title's icon in the Project Overview window, and choose Set Thumbnail from View from the shortcut menu to set the button's thumbnail to a specific frame in the source media file.
Layer	If the current thumbnail file uses layers, you can choose to display a single layer or the combined layers for your thumbnail image. 1. Click the expand button  next to the Thumbnail Media heading to expand the controls. 2. Select the Layer box and click the down arrow button . 3. Choose a layer from the drop-down list. If you want to display the combined layers, choose Composited layer.
Mask	Displays the path to the current mask file. A thumbnail mask determines which portion of the thumbnail will be visible. Select the control and click the down arrow button  to display a menu, where you can choose a mask file, view Media Properties, crop and adjust media settings, or remove the current file. For more information about masking, see "Creating Custom Masks" on page 244.

Item	Description
Layer	If the current mask file uses layers, you can choose to use a single layer or the combined layers as a mask for your thumbnail image. 1. Click the  button next to the Mask heading to expand the controls. 2. Select the Layer box and click the down arrow button . 3. Choose a layer from the drop-down list. If you want to use the combined layers as a mask, choose Composited layer.
Start time	If you're using an animated file as a thumbnail, the Start time setting determines the point at which playback will start in the animated button. If you want to display a single frame from an animated file as a static image, the Start time setting determines which frame is displayed. To change the start time, select the box and type a new setting or select the box and click the down arrow button  to display a slider that you can use to adjust the setting.
Style	Determines whether the button is displayed as a still image or an animated button: ■ Still - Choose Still to display a static image in the button. If your thumbnail file is animated, the Start time setting determines which frame is displayed. ■ Animated - The animated thumbnail file is played in the button frame.
Frame Media	Displays the path to the current frame image file. Select the control and click the down arrow button  to display a menu, where you can choose a file, view Media Properties, crop and adjust media settings, or remove the current file.
Layer	If the current thumbnail file uses layers, you can choose to display a single layer or the combined layers for your thumbnail image. 1. Click the  button next to the Frame Media heading to expand the controls. 2. Select the Layer box and click the down arrow button . 3. Choose a layer from the drop-down list. If you want to display the combined layers, choose Composited layer.

Item	Description
Mask	Displays the path to the current mask file. A frame mask determines which portion of the frame will be visible. Select the control and click the down arrow button  to display a menu, where you can choose a file, view Media Properties, crop and adjust media settings, or remove the current file. For more information about masking, see "Creating Custom Masks" on page 244.
Layer	If the current mask file uses layers, you can choose to use a single layer or the combined layers as a mask for your button frame. 1. Click the  button next to the Mask heading to expand the controls. 2. Select the Layer box and click the down arrow button . 3. Choose a layer from the drop-down list. If you want to use the combined layers as a mask, choose Composited layer.
Start time	If you're using an animated file as a button frame, the Start time setting determines the point at which playback will start in the animated frame. If you want to display a single frame from an animated file as a static button frame, the Start time setting determines which frame is displayed. To change the start time, select the box and type a new setting or select the box and click the down arrow button  to display a slider that you can use to adjust the setting.
Style	Determines whether the frame is displayed as a static image or an animated frame: ■ Still - Choose Still to display the frame as a static image. If your frame file is animated, the Start time setting determines which frame is displayed. ■ Animated - The animated file is played as the button frame.

Highlight



Animated button highlights are not supported. If a button has keyframe animation applied, button highlighting is not animated or may not be visible when you burn your project to disc. You will see the button highlighting when you preview your DVD Architect project but not after it is burned to disc.

Item	Description
Style	Highlight controls determine the appearance of a button when it is selected and activated. ■ Rectangle - Displays a colored rectangle over the button's text and image. ■ Mask overlay - Highlights the button's text and image. ■ Text rectangle - Displays a colored rectangle around the button text. ■ Image rectangle - Displays a colored rectangle around the button image. ■ Text mask overlay - Highlights the button text. ■ Image mask overlay - Highlights the button image ■ Underline - Displays an underline under the button. ■ Custom - Allows you to specify a custom highlighting mask image and transparency style.
Mask	If you selected Custom from the Style menu, select the Mask box and click the down arrow button  to display a menu where you can choose a mask file, view media properties, crop and adjust media settings, remove the current file, or open in a graphics editor.
Layer	If the current mask file uses layers, you can choose to display a single layer or the combined layers for your mask: 1. Click the expand button  next to the Mask heading to expand the controls. 2. Select the Layer box and click the down arrow button . 3. Choose a layer from the drop-down list. If you want to use the combined layers, choose Composited layer.

Item	Description
Mask mapping	To specify how transparency is determined from the mask, select the Mask mapping control, click the down arrow button  , and choose a setting from the drop-down list.

Transparency



Maps the alpha channel of the button highlight mask to the four colors used in the color set selected in the Selected button colors or Activated button colors drop-down list.

The most opaque pixels (those with alpha values of 192 to 255) are mapped to the color set's fill color (color 1), and the most transparent pixels (those with alpha values of 0 to 63) are mapped to the color set's transparent color (color 4).

Intensity



Maps the average pixel intensity of the button highlight mask to the four colors used in the color set selected in the Selected button colors or Activated button colors drop-down list.

The lightest pixels (those with an average intensity of 192 to 255) are mapped to the color set's fill color (color 1), and the darkest pixels (those with an average intensity of 0 to 63) are mapped to the color set's transparent color (color 4).

Color channel

Item	Description
	 Maps color channels in the button highlight mask to the four colors used in the color set selected in the Selected button colors or Activated button colors drop-down list. A pixel containing any red channel component uses the color set's fill color (color 1), a pixel containing any green channel component uses the color set's anti-alias color (color 2), a pixel containing any blue component uses the color set's outline/background color (color 3), and a completely black pixel uses the color set's transparent color (color 4).

Navigation

The controls on the Navigation page determine which button is selected when you use the Up, Down, Left, and Right buttons on your DVD or Blu-ray Disc remote control.

Item	Description
Left	Select the box and choose a command from the menu to determine which button is selected when you press the corresponding button on your remote control.
Right	
Up	Choose Auto if you want the software to automatically determine navigation based on button layout.
Down	

 You can also use the navigation tool to view and edit button navigation. For more information, see "[The navigation tool](#)" on page 181.

Color Sets

Color sets determine which colors are used to indicate selected, activated, and inactive buttons on your menu page.

You can have four project-wide color sets that are available to every menu page in your project, and each menu page in your project can also have up to four custom color sets with four colors each. Each color set includes a fill color, outline/background color, anti-alias color, and transparent color.

Use the Color Sets page to edit the color sets that will be available for the selected menu, and then use the General page in the Menu Page Properties pane to choose which color sets are used for the selected, activated, and inactive buttons on your menu.

For more information about working with color sets, see "[Using color sets](#)" on page 161.

Button Region

The button region control allows you to set the highlight colors for buttons within button regions on the timeline.

Item	Description
Selected button colors	Click the down arrow button  and choose a color set that will be used to display the selected button on a page. Choose None if you do not want to use color sets to display button highlighting.
Activated button colors	Click the down arrow button  and choose a color set that will be used to display the selected button when you press Enter on the DVD or Blu-ray Disc remote control to activate it. Choose None if you do not want to use color sets to display button highlighting.
Default colors	Click the down arrow button  and choose a color set that will be used to display unselected buttons on the menu. Choose None if you do not want to use color sets to display button highlighting.
Use subtitle colors	If there are buttons placed on a graphic subtitle, you can set the color of the unselected buttons. Click the down arrow button  and choose No if you do not want to use color sets for unselected buttons. Select When available if a color set has been designated for the subtitle.

Menu Page Properties

You can use the Menu Page Properties pane in the Properties window to adjust the length, background media, end actions, and remote control button behavior for the selected page.

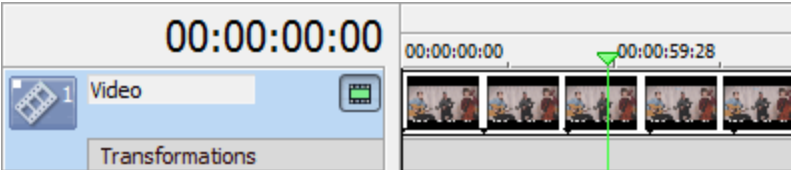
To edit a menu's properties, perform the following actions:

1. If the window isn't already visible, choose Properties from the View menu.
2. Double-click a menu in the Project Overview window (or navigate in the workspace) to open the menu you want to edit.
3. Click a button at the top of the Properties window.

For more information about creating menu-based projects, see "[Menu-based projects](#)" on page 148.

General

Item	Description
Reduce interlace flicker	Select the box, click the down arrow button  , and choose a setting from the drop-down list to turn flicker reduction on or off. Turn flicker reduction on when using still images that contain thin horizontal lines.
Start script	If you have already created at least one DVD script in your project, select the box, click the down arrow button , and choose the script that will be played when the menu is accessed.  Scripting is not available for Blu-ray Disc projects.
Menu length	Select the box, click the down arrow button , and choose a setting from the drop-down list to set the length of the current menu. A menu's length determines how much time is available for a menu's background media and animated buttons. ■ Auto calculate - The software will determine the menu length based on the background audio, video, and button animations. ■ Specify - You can set the length of the menu using the Length control.  If you type a value in the Length box that is longer than the background video, the background video will end, and any animated thumbnails will continue to play until the end of the menu. If you want the menu to loop smoothly when your menu duration is longer than the video, create a new background video that matches the desired menu length.
Length	If you chose Specify from the Menu length drop-down list, select the box and type a number in the box (or click the down arrow button  to display a slider you can drag) to set the length of the menu.

Item	Description
Loop point	Select the box, click the down arrow button , and drag the slider (or type a value in the box) to set the point at which buttons will be displayed and looped playback will begin (if the Command setting on the End Action page is set to Loop). If the menu's end action is not set to Loop, the menu loop point will set the point at which buttons are displayed, but the menu will not loop.  You can also click in the Timeline window to position the cursor at the desired loop point, and then click the Set Loop Point button . For example, if you set the Menu length to 00:00:30.000 and set the Loop point to 00:00:20.000, the first 20 seconds of the background media are played, and then menu buttons are displayed and playback repeats from 00:00:20.000 to 00:00:30.000. The loop point is represented by a green marker in the Timeline window:  For more information about editing a menu's end action, see the <i>End action</i> heading in this help topic.  To insert transformation keyframes for a button, Show Before Loop Point must be set to Yes for the object in the Transformations page in the item's Properties window, and the loop point must be set to a point later than 00:00:00.000 on the timeline. For more information, see "Transformation keyframes" on page 206.
Selected button colors	To choose the color set that will be used to display the selected button on a page, select the box, click the down arrow button , and choose a color set (or choose None if you do not want to use color sets to display button highlighting). For more information about masks and highlighting, see "Creating Custom Masks" on page 244.
Activated button colors	To choose the color set that will be used to display the selected button when you press the Enter button to activate it, select the box, click the down arrow button , and choose a color set (or choose None if you do not want to use color sets to display button highlighting).

Item	Description
Inactive button colors	To choose the color set that will be used to display unselected buttons on the menu, select the box, click the down arrow button , and choose a color set (or choose None if you do not want to use color sets to display button highlighting).  The Inactive button colors control must be set to None for Blu-ray Disc projects.

Background Media

Background media plays in the background of a menu when it is displayed. You can choose to use no background media, the media associated with the menu's current theme, or specific audio and/or video files.

 Tips:

- If you want your menu to loop, use the controls on the End Action page.
- If you want to apply background media from a theme, use the Backgrounds window. For more information, see "[The Backgrounds window](#)" on page 23.

Item	Description
Video	This box displays the path to the background video file that will be used. Select the control and click the down arrow button  to display a menu, where you can choose a file, view media properties, crop and adjust media settings, remove the current file, open the file in your selected graphics editor, or explore the file's containing folder on your drive.  Tips: ■ To change a file quickly, drag a file from the Explorer window to the Video box. ■ If you use a background video in your menu, we recommend rendering the video in progressive-scan format before adding it to your project. On the Video tab of the Optimize Disc dialog, click the Progressive box and choose Auto to render the noncompliant menu as progressive-scan video. Progressive-scan menus will provide the sharpest-looking text and highest level of DVD and Blu-ray Disc player compatibility. If you need to use interlaced video as a menu background, click the Progressive box and choose No. When you choose No, the noncompliant menu will be rendered as interlaced video.  Some players will not display the last frame of a menu correctly when using interlaced background video.
Layer	If the current background video is a still image that uses layers, you can choose to display a single layer or the combined layers for your menu background: 1. Click the expand button  next to the Video heading to expand the controls. 2. Select the Layer box and click the down arrow button . 3. Choose a layer from the drop-down list. If you want to display the combined layers, choose Composited layer.
Audio	This box displays the path to the background audio file that will be used. Select the control and click the down arrow button  to display a menu, where you can choose a new file, view media properties, or remove the current file.

Item	Description
Highlight mask	If you want to apply a mask to your menu to define highlighting for selected or inactive buttons, select the Highlight mask control and click the down arrow button  to display a menu, where you can choose a file, view media properties, crop and adjust media settings, or remove the current file. The menu highlight mask and button highlight mask are combined, and the Selected button colors, Activated button colors, or Inactive button colors color set is applied to the masked area for each button depending on its current state. For more information about masks and highlighting, see "Creating Custom Masks" on page 244.
Layer	If the highlight mask image uses layers, you can choose to use a single layer or the combined layers for your highlight mask: 1. Click the expand button  next to the Highlight mask heading to expand the controls. 2. Select the Layer box and click the down arrow button . 3. Choose a layer from the drop-down list. If you want to use the combined layers, choose Composited layer.

Item	Description
Highlight mask mapping	To specify how transparency is determined from the mask, select the Highlight mask mapping control, click the down arrow button  , and choose a setting from the drop-down list:

Transparency



Maps the alpha channel of the menu highlight mask to the four colors used in the color set selected in the Selected button colors or Activated button colors drop-down list.

The most opaque pixels (those with alpha values of 192 to 255) are mapped to the color set's fill color (color 1), and the most transparent pixels (those with alpha values of 0 to 63) are mapped to the color set's transparent color (color 4).

Intensity



Maps the average pixel intensity of the menu highlight mask to the four colors used in the color set selected in the Selected button colors or Activated button colors drop-down list.

The lightest pixels (those with an average intensity of 192 to 255) are mapped to the color set's fill color (color 1), and the darkest pixels (those with an average intensity of 0 to 63) are mapped to the color set's transparent color (color 4).

Color channel

Item	Description
	 Maps color channels in the menu highlight mask to the four colors used in the color set selected in the Selected button colors or Activated button colors drop-down list. A pixel containing any red channel component uses the color set's fill color (color 1), a pixel containing any green channel component uses the color set's anti-alias color (color 2), a pixel containing any blue component uses the color set's outline/background color (color 3), and a completely black pixel uses the color set's transparent color (color 4).
Stretch type	Select the box, click the down arrow button , and choose a setting from the drop-down list to indicate how background video or images will be scaled to fit the menu page. ■ Letterbox - The background media fills the width of the menu, and black letterboxing bars are displayed above and below or to the right and left as needed. ■ Zoom to fit - The background is magnified to fill the menu. If the aspect ratio of the image doesn't match your project's aspect ratio, the image will extend beyond the screen. ■ Stretch to fit - The background is stretched horizontally and vertically to fill the menu. If the aspect ratio of the image doesn't match your project's aspect ratio, the image will be distorted.

End Action

A menu's end action determines what happens at the end of the menu if a user doesn't select a button.

Item	Description
Command	Determines what happens after the menu plays once: ■ Loop - The menu will play continuously, repeating playback from the loop point until the user activates another button. Menu buttons are not displayed until playback reaches the loop point. You can set the loop point in the General page of the Menu Page Properties pane. If you want the menu to loop smoothly, ensure the background video length matches the menu length. ■ Hold - The menu will play once and then display a static menu until the user activates another button. ■ Activate button - The button you specify will be activated after the time set by the Timeout control has passed if the user hasn't activated another button. You can use this setting to automatically stop or resume playback or display another menu page or title if the user doesn't choose another action within a set time.
Timeout	When Activate button is selected in the Command drop-down list, the button you choose will be activated if the user doesn't choose another action before the timeout duration has passed. To change the duration, select the box and type a new setting or select the box and click the down arrow button  to display a slider that you can use to adjust the setting. If the Timeout setting is longer than the menu length, the last frame is held until the timeout duration.
Button	When Activate button is selected in the Command drop-down list, choose the button you want to activate if the user hasn't activated another button before the Timeout duration has passed. Choose Selected if you want to activate the user's currently selected button.

Remote Buttons

For each menu, you can allow or suspend operation of individual buttons on the DVD or Blu-ray Disc remote control.

For example, you can use the Remote Buttons controls to prevent the user from navigating away from the menu before it's finished playing.

To turn each button on or off, select the box, click the down arrow button , and choose On or Off from the drop-down list.

Item	Description
Title play	When On is selected, the user can use the Title button on the remote to skip to a specific video, music/video compilation, or picture compilation. When Off is selected, this button is not available.
Stop	When On is selected, the user can press Stop to stop the disc. When Off is selected, this button is not available.
Time/chapter search	When Enable is selected, the user can use the Time button on the remote to skip to a specific play time or chapter. When Off is selected, this button is not available.
Previous/Up	When On is selected, the user can press the Previous/Up button to navigate to the previous chapter or menu page. When Off is selected, this button is not available.
Next	When On is selected, the user can press the Next button to navigate to the next chapter or menu page. When Off is selected, this button is not available.
Fast scan	When On is selected, the user can press the Fwd button to seek forward through a video, music/video compilation, or picture compilation. When Off is selected, this button is not available.
Backward scan	When On is selected, the user can press the Rev button to seek backward through a video, music/video compilation, or picture compilation. When Off is selected, this button is not available.
Top menu	When On is selected, the user can press the Menu button to return to the disc's top-level menu. When Off is selected, this button is not available.
Menu	These controls are not available for menu pages. You can define the behavior of the Menu button for media files, picture compilations, and music/video compilations.
Resume	When On is selected, the user can press the Resume (Menu) button to resume playback of a title after exiting it by pressing the Menu button. When Off is selected, this button is not available.
Button navigation	When On is selected, the user can press the Up/Down/Left Right buttons on the remote to navigate between menu buttons. When Off is selected, the buttons are not available.

Item	Description
Pause	When On is selected, the user can press the Pause button on the remote to temporarily suspend playback. When Off is selected, this button is not available.
Audio track change	When On is selected, the user can press the Audio button on the remote to choose which audio track is played. When Off is selected, this button is not available.
Subtitle track change	When On is selected, the user can press the Subtitle button on the remote to choose which subtitle track is displayed. When Off is selected, this button is not available.
Video angle change	When On is selected, the user can press the Angle button on the remote to choose which video track is displayed. When Off is selected, this button is not available.
Video mode	When On is selected, the user can press the Video Mode button on the remote to switch widescreen, letterboxed, and pan-and-scan presentation in a 16:9 video. When Off is selected, this button is not available.

Color Sets

Color sets determine which colors are used to indicate selected, activated, and inactive buttons on your menu page.

You can have four project-wide color sets that are available to every menu page in your project, and each menu page in your project can also have up to four custom color sets with four colors each. Each color set includes a fill color, outline/background color, anti-alias color, and transparent color.

Use the Color Sets page to edit the color sets that will be available for the selected menu, and then use the General page to choose which color sets are used for the selected, activated, and inactive buttons on your menu.



In Blu-ray Disc projects, color sets are not supported for inactive buttons. None (all transparent) must be chosen from the Inactive button colors drop-down list.

For more information about working with color sets, see "[Using color sets](#)" on page 161.

Subtitle Properties

You can use the Properties window to adjust subtitle text positions and adjust which color set is used to draw subtitle text. You can choose which color set is used for each subtitle event independently.

To edit subtitle properties, perform the following actions:

1. If the window isn't already visible, choose Properties from the View menu.
2. Double-click a title in the Project Overview window (or navigate in the workspace) to open the title you want to edit.
3. Select a subtitle event in the Timeline window or a text box in the workspace. The controls in the Properties window display different controls depending on the current selection.

For more information about working with subtitles, see ["Adding subtitles"](#) on page 137.

Transformations

The Transformations page is displayed in the Properties window when you select a subtitle text box in the workspace.

Item	Description
X position Y position	Edit the X position and Y position values to change the center of the selected text box's position. These coordinates are based on the frame size of your project. For example, if you're creating an NTSC DV project with a frame size of 720x480, (0,0) is the top-left corner of the frame, and (720,480) is the lower-right corner. ■ Select the number and type a new value. ■ Use the spin controls to adjust the value. ■ Select the value and click the down arrow button  to display a slider that you can use to adjust the value.
X size Y size	Edit the X size and Y size values to change the size of the selected text box. ■ Select the number and type a new value. ■ Use the spin controls to adjust the value. ■ Select the value and click the down arrow button  to display a slider that you can use to adjust the value.
Maintain aspect ratio	Select the Maintain aspect ratio box, click the down arrow button , and choose Yes from the drop-down list if you do not want the text to be stretched when you change the height or width of the text box.

Subtitle Event

The Subtitle Event page is displayed in the Properties window when you select a subtitle event in the Timeline window.

Choose a setting from the Colors drop-down list to assign a color set to the selected subtitle events.

You can create a custom color set for each title in your project using the Color Sets page in the Media Properties window.



Subtitle events are drawn over the entire screen. If the color set's transparent color is not fully transparent, the screen will be tinted.

Color Sets

Color sets determine which colors are used to display subtitles.

You can have four project-wide color sets that are available to every menu page in your project, and each title in your project can also have up to four custom color sets with four colors each. Each color set includes a fill color, outline/background color, anti-alias color, and transparent color.

Use the Color Sets page to edit the color sets that will be available for the selected title, and then use the Subtitle Event page to choose which color sets are used for the current subtitle.

For more information about working with color sets, see "[Using color sets](#)" on page 161.

Media Properties

You can use the Media Properties pane in the Properties window to adjust the end actions, selected audio and video files, and remote control button behavior for the selected title.

To edit a title's properties, perform the following actions:

1. If the window isn't already visible, choose Properties from the View menu.
2. Double-click a title in the Project Overview window (or navigate in the workspace) to open the title you want to edit.

If you want to edit the event for an alternate video track, select an event in the Timeline window.

3. Click a button at the top of the Properties window.

For more information about adding titles to a project, see "[Adding titles or playlists to a menu](#)" on page 150.

General

Item	Description
Reduce interlace flicker	Select the box, click the down arrow button  , and choose a setting from the drop-down list to turn flicker reduction on or off. Turn flicker reduction on when using still images that contain thin horizontal lines.
Start Script	If you have already created at least one DVD script in your project, select the box, click the down arrow button  , and choose the script that will be played when the selected title is accessed.  Scripting is not available for Blu-ray Disc projects.

Track Media

The Video and Audio controls in the Track Media page determine which files are used to play a title's audio and video.

Item	Description
Video	Displays the path to the video file that will be used. Select the control and click the down arrow button  to display the a menu, where you can choose a file, view media properties, crop and adjust media settings, remove the current file, edit the file in your specified graphics editor, or explore the file's containing folder on your drive.  To change a file quickly, drag a file from the Explorer window to the Video box.
Audio	Displays the path to the audio file that will be used. If a title has multiple audio tracks, there will be a separate Audio control for each track. Select the control and click the down arrow button  to display the a menu, where you can choose a new file, view media properties, or remove the current file.  To change a file quickly, drag a file from the Explorer window to the Audio box.

End Action

A media file's end action determines what happens after a media file is finished playing.

Item	Description
Command	Determines what happens after your media file is finished playing: ■ Link - You can link to any menu, media file, and chapter point. Use the Destination and Destination chapter, Destination item, or Destination button controls to set the target. ■ Stop - Your disc will stop after the media file stops.

Item	Description
Destination	When Link is selected in the Command drop-down list, choose the menu, title, playlist, or script that will be displayed.  If you want the user's remote control navigation to follow the same path as your end actions, set the media file's end action and the remote's Menu button to the same target destination. If no menu has been displayed, Most recent menu will display the first menu on the disc.
Destination chapter Destination item	When your end action links to a video, music/video compilation, picture compilation, or playlist, choose the specific chapter in the destination file that will be displayed. When your end action links to a menu, choose Start or Loop Point to indicate the point from which the menu will be played. For more information about setting a menu loop point, see "Setting looping points for menus" on page 156.
Destination button	When your end action links to a menu, you can choose the button you want to use as the default selected button in the destination menu. If you choose Default, the first button listed under the menu in the Project Overview window is used as the default.
Set audio track	Choose a setting from the drop-down list to choose which audio track will be played in a destination title. Choose No change to use the last-set track.  If you use the Set audio track control to change the audio track, the new track will be used when you navigate between titles unless another button action, end action, or user action (via the remote control) changes the track. When setting up your project, we recommend using the same track sequence for all videos, picture compilations, and music/video compilations. If necessary, insert empty audio tracks to maintain the track sequence so that the disc will continue to play the same track number when you transition playback between titles. For more information about adding audio tracks, see "Adding audio tracks" on page 132.

Item	Description
Set subtitle track	Choose a setting from the drop-down list to choose which subtitle track will be played in a destination title. Choose Off to turn subtitles off, or choose No change to use the last-set track.  If you use the Set subtitle track control to change the subtitle track, the new track will be used when you navigate between titles unless another button action, end action, or user action (via the remote control) changes the track. When setting up your project, we recommend using the same track sequence for all videos, picture compilations, and music/video compilations. If necessary, insert empty subtitle tracks to maintain the track sequence so that the disc will continue to play the same track number when you transition playback between titles. For more information about adding subtitle tracks, see "Adding subtitles" on page 137.
Set video angle	Choose a setting from the drop-down list to choose which video track will be played in a destination title. Choose No change to use the last-set track.  If you use the Set video angle control to change the video track, the new track will be used when you navigate between titles unless another button action, end action, or user action (via the remote control) changes the track.

Remote Buttons

For each media file, you can allow or suspend operation of individual buttons on the DVD or Blu-ray Disc remote control and set the behavior of the Menu button.

To turn each button on or off, select the box, click the down arrow button , and choose On or Off from the drop-down list.

Item	Description
Title play	When On is selected, the user can use the Title button on the remote to skip to a specific chapter. When Off is selected, this button is not available.
Stop	When On is selected, the user can press Stop to stop the disc. When Off is selected, this button is not available.
Time/chapter search	When On is selected, the user can use the Time button on the remote to skip to a specific play time or chapter. When Off is selected, this button is not available.

Item	Description
Previous/Up	When On is selected, the user can press the Previous/Up button to navigate to the previous chapter or menu page. When Off is selected, this button is not available.
Next	When On is selected, the user can press the Next button to navigate to the next chapter or menu page. When Off is selected, this button is not available.
Fast scan	When On is selected, the user can press the Fwd button to seek forward through a video, music/video compilation, or picture compilation. When Off is selected, this button is not available.
Backward scan	When On is selected, the user can press the Rev button to seek backward through a video, music/video compilation, or picture compilation. When Off is selected, this button is not available.
Top menu	When On is selected, the user can press the Menu button to return to the disc's top-level menu. When Off is selected, this button is not available.

Item	Description
Menu	When On is selected, the user can press the Menu button during playback. Click the expand button  to expand the Menu controls so you can define the behavior of the Menu button for media files, picture compilations, and music/video compilations.  This item is not available for Blu-ray Disc projects. ■ Command - Determines what happens when the Menu button is pressed while your media file is playing: ○ Link - You can link to any menu, media file, and chapter point. Use the Destination and Destination chapter controls to set the target. ○ Stop - Your disc will stop when the Menu button is pressed. ■ Destination - When Link is selected in the Command drop-down list, choose the menu, media file, or script that will be displayed.  If you want the user's remote control navigation to follow the same path as your end actions, set the media file's end action and the remote's Menu button to the same target destination. If no menu has been displayed, Most recent menu will display the first menu on the disc. ■ Destination chapter - When your button links to a video, music/video compilation, or picture compilation, choose the specific chapter in the destination file that will be displayed. ■ Destination button - When your Menu button links to a menu, you can choose the button you want to use as the default selected button in the destination menu. If you choose Default, the first button listed under the menu in the Project Overview window is used as the default. ■ Set audio track - Choose a setting from the drop-down list to choose which audio track will be played a destination title. Choose No change to use the last-set track. ■ Set subtitle track - Choose a setting from the drop-down list to choose which subtitle track will be played in a destination title. Choose No change to use the last-set track. When Off is selected, this button is not available.

Item	Description
Resume	When On is selected, the user can press the Resume (Menu) button to resume playback of a title after exiting it by pressing the Menu button. When Off is selected, this button is not available.
Button navigation	When On is selected, the user can press the Up/Down/Left Right buttons on the remote to navigate between menu buttons. When Off is selected, the buttons are not available.
Pause	When On is selected, the user can press the Pause button on the remote to temporarily suspend playback. When Off is selected, this button is not available.
Audio track change	When On is selected, the user can press the Audio button on the remote to choose which audio track is played. When Off is selected, this button is not available.
Subtitle track change	When On is selected, the user can press the Subtitle button on the remote to choose which subtitle track is displayed. When Off is selected, this button is not available. This option also removes the user's ability to turn subtitles off while watching the disc.
Video angle change	When On is selected, the user can press the Angle button on the remote to choose which video track is displayed. When Off is selected, this button is not available.
Video mode	When On is selected, the user can press the Video Mode button on the remote to switch widescreen, letterboxed, and pan-and-scan presentation in a 16:9 video. When Off is selected, this button is not available.

Color Sets

You can use the Color Sets controls in the Properties window to adjust which color set is used to draw subtitle events.

You can have four project-wide color sets that are available to every title in your project, and each title in your project can also have up to four custom color sets with four colors each. Each color set includes a fill color, outline/background color, anti-alias color, and transparent color.

For more information about working with color sets, see "[Using color sets](#)" on page 161.

Picture Compilation Properties

You can use the Picture Compilation Properties controls in the Properties window to adjust the end actions and remote control button behavior for the selected picture compilation.

To edit a picture compilation's properties, perform the following actions:

1. If the window isn't already visible, choose Properties from the View menu.
2. Double-click a picture compilation in the Project Overview window (or navigate in the workspace) to open the compilation you want to edit.
3. Click a button at the top of the Properties window.

For more information about creating picture compilations, see "[Picture compilations](#)" on page 192.

General

Item	Description
Reduce interlace flicker	Select the box, click the down arrow button  , and choose a setting from the drop-down list to turn flicker reduction on or off. Turn flicker reduction on when using still images that contain thin horizontal lines.
Start Script	If you have already created at least one DVD script in your project, select the box, click the down arrow button  , and choose the script that will be played when the selected compilation is accessed.  Scripting is not available for Blu-ray Disc projects.

Track Media

You can use track media to set your picture compilation to music. The selected background audio will play in the background of your picture compilation.

Item	Description
Audio	This box displays the path to the background audio file that will be used. If a picture compilation has multiple audio tracks, there will be a separate Audio control for each track. Select the control and click the down arrow button  to display a menu, where you can choose a file, view media properties, or remove the current file.  You can also change the audio by dragging a new audio file from the Explorer window to the Audio box or to a slide in the Compilation window.

End Action

Item	Description
Command	Determines what happens after your media file is finished playing: ■ Link - You can link to any menu, media file, and chapter point. Use the Destination and Destination chapter, Destination item, or Destination button controls to set the target. ■ Stop - Your disc will stop after the media file stops.
Destination	When Link is selected in the Command drop-down list, choose the menu, title, playlist, or script that will be displayed.  If you want the user's remote control navigation to follow the same path as your end actions, set the media file's end action and the remote's Menu button to the same target destination. If no menu has been displayed, Most recent menu will display the first menu on the disc.
Destination chapter Destination item	When your end action links to a video, music/video compilation, picture compilation, or playlist, choose the specific chapter in the destination file that will be displayed. When your end action links to a menu, choose Start or Loop Point to indicate the point from which the menu will be played. For more information about setting a menu loop point, see "Setting looping points for menus" on page 156.
Destination button	When your end action links to a menu, you can choose the button you want to use as the default selected button in the destination menu. If you choose Default, the first button listed under the menu in the Project Overview window is used as the default.

Item	Description
Set audio track	Choose a setting from the drop-down list to choose which audio track will be played in a destination title. Choose No change to use the last-set track.  If you use the Set audio track control to change the audio track, the new track will be used when you navigate between titles unless another button action, end action, or user action (via the remote control) changes the track. When setting up your project, we recommend using the same track sequence for all videos, picture compilations, and music/video compilations. If necessary, insert empty audio tracks to maintain the track sequence so that the disc will continue to play the same track number when you transition playback between titles. For more information about adding audio tracks, see "Adding audio tracks" on page 132.
Set subtitle track	Choose a setting from the drop-down list to choose which subtitle track will be played in a destination title. Choose Off to turn subtitles off, or choose No change to use the last-set track.  If you use the Set subtitle track control to change the subtitle track, the new track will be used when you navigate between titles unless another button action, end action, or user action (via the remote control) changes the track. When setting up your project, we recommend using the same track sequence for all videos, picture compilations, and music/video compilations. If necessary, insert empty subtitle tracks to maintain the track sequence so that the disc will continue to play the same track number when you transition playback between titles. For more information about adding subtitle tracks, see "Adding subtitles" on page 137.
Set video angle	Choose a setting from the drop-down list to choose which video track will be played in a destination title. Choose No change to use the last-set track.  If you use the Set video angle control to change the video track, the new track will be used when you navigate between titles unless another button action, end action, or user action (via the remote control) changes the track.

Remote Buttons

For each picture compilation, you can allow or suspend operation of individual buttons on the DVD or Blu-ray Disc remote control and set the behavior of the Menu button.

To turn each button on or off, select the box, click the down arrow button , and choose On or Off from the drop-down list.

Item	Description
Title play	When On is selected, the user can use the Title button on the remote to skip to a specific chapter. When Off is selected, this button is not available.
Stop	When On is selected, the user can press Stop to stop the disc. When Off is selected, this button is not available.
Time/chapter search	When On is selected, the user can use the Time button on the remote to skip to a specific play time or chapter. When Off is selected, this button is not available.
Previous/Up	When On is selected, the user can press the Previous/Up button to navigate to the previous chapter or menu page. When Off is selected, this button is not available.
Next	When On is selected, the user can press the Next button to navigate to the next chapter or menu page. When Off is selected, this button is not available.
Fast scan	When On is selected, the user can press the Fwd button to seek forward through a video, music/video compilation, or picture compilation. When Off is selected, this button is not available.
Backward scan	When On is selected, the user can press the Rev button to seek backward through a video, music/video compilation, or picture compilation. When Off is selected, this button is not available.
Top menu	When On is selected, the user can press the Menu button to return to the disc's top-level menu. When Off is selected, this button is not available.

Item	Description
Menu	When On is selected, the user can press the Menu button during playback. Click the expand button  to expand the Menu controls so you can define the behavior of the Menu button for media files, picture compilations, and music/video compilations.  This item is not available for Blu-ray Disc projects. ■ Command - Determines what happens when the Menu button is pressed while your media file is playing: ○ Link - You can link to any menu, media file, and chapter point. Use the Destination and Destination chapter controls to set the target. ○ Stop - Your disc will stop when the Menu button is pressed. ■ Destination - When Link is selected in the Command drop-down list, choose the menu, media file, or script that will be displayed.  If you want the user's remote control navigation to follow the same path as your end actions, set the media file's end action and the remote's Menu button to the same target destination. If no menu has been displayed, Most recent menu will display the first menu on the disc. ■ Destination chapter - When your button links to a video, music/video compilation, or picture compilation, choose the specific chapter in the destination file that will be displayed. ■ Destination button - When your Menu button links to a menu, you can choose the button you want to use as the default selected button in the destination menu. If you choose Default, the first button listed under the menu in the Project Overview window is used as the default. ■ Set audio track - Choose a setting from the drop-down list to choose which audio track will be played a destination title. Choose No change to use the last-set track. ■ Set subtitle track - Choose a setting from the drop-down list to choose which subtitle track will be played in a destination title. Choose No change to use the last-set track. When Off is selected, this button is not available.

Item	Description
Resume	When On is selected, the user can press the Resume (Menu) button to resume playback of a title after exiting it by pressing the Menu button. When Off is selected, this button is not available.
Button navigation	When On is selected, the user can press the Up/Down/Left Right buttons on the remote to navigate between menu buttons. When Off is selected, the buttons are not available.
Pause	When On is selected, the user can press the Pause button on the remote to temporarily suspend playback. When Off is selected, this button is not available.
Audio track change	When On is selected, the user can press the Audio button on the remote to choose which audio track is played. When Off is selected, this button is not available.
Subtitle track change	When On is selected, the user can press the Subtitle button on the remote to choose which subtitle track is displayed. When Off is selected, this button is not available. This option also removes the user's ability to turn subtitles off while watching the disc.
Video angle change	When On is selected, the user can press the Angle button on the remote to choose which video track is displayed. When Off is selected, this button is not available.
Video mode	When On is selected, the user can press the Video Mode button on the remote to switch widescreen, letterboxed, and pan-and-scan presentation in a 16:9 video. When Off is selected, this button is not available.

Slide

The Slide page of the Properties window displays the settings for the selected slide.

Item	Description
Image	This box displays the path to the image file that will be used. Select the control and click the down arrow button  to display a menu, where you can choose a file, view media properties, crop and adjust media settings, remove the current file, edit the image in your specified graphics editor, or explore the image's containing folder on your drive.  You can also change the slide image by dragging a new image from the Explorer window to the Image box or to a slide in the Compilation window.
Stretch type	Select the box, click the down arrow button , and choose a setting from the drop-down list to indicate how the image will be scaled to fit the screen. ■ Letterbox - The background media fills the width of the menu, and black letterboxing bars are displayed above and below or to the right and left as needed. ■ Zoom to fit - The background is magnified to fill the menu. If the aspect ratio of the image doesn't match your project's aspect ratio, the image will extend beyond the screen. ■ Stretch to fit - The background is stretched horizontally and vertically to fill the menu. If the aspect ratio of the image doesn't match your project's aspect ratio, the image will be distorted.
Length	This box displays the duration that the selected slide will be displayed. To change the duration, select the box, click the down arrow button , and drag the slider (or type a value in the edit box).
Orientation	To rotate the selected slide, select the box, click the down arrow button , and choose a setting from the menu.  You can also rotate the slide image using the Rotate Clockwise  and Rotate Counterclockwise  buttons in the Compilation window.

Color Sets

You can use the Color Sets page in the Properties window to adjust which color set is used to draw subtitle text.

You can have four project-wide color sets that are available to every title in your project, and each title in your project can also have up to four custom color sets with four colors each. Each color set includes a fill color, outline/background color, anti-alias color, and transparent color.

For more information about working with color sets, see "[Using color sets](#)" on page 161.

Music/Video Compilation Properties

You can use the Music/Video Compilation Properties controls in the Properties window to adjust the end actions and remote control button behavior for the selected music or video compilation.

To edit a music or video compilation's properties, perform the following actions:

1. If the window isn't already visible, choose Properties from the View menu.
2. Double-click a music or video compilation in the Project Overview window (or navigate in the workspace) to open the compilation you want to edit.
3. Click a button at the top of the Properties window.

For more information about creating music/video compilations, see "[Music/video compilations](#)" on page 186.

General

Item	Description
Reduce interlace flicker	Select the box, click the down arrow button  , and choose a setting from the drop-down list to turn flicker reduction on or off. Turn flicker reduction on when using still images that contain thin horizontal lines.
Start Script	If you have already created at least one DVD script in your project, select the box, click the down arrow button  , and choose the script that will be played when the music/video compilation is accessed.  Scripting is not available for Blu-ray Disc projects.

End Action

Item	Description
Command	Determines what happens after your media file is finished playing: ■ Link - You can link to any menu, media file, and chapter point. Use the Destination and Destination chapter, Destination item, or Destination button controls to set the target. ■ Stop - Your disc will stop after the media file stops.

Item	Description
Destination	When Link is selected in the Command drop-down list, choose the menu, title, playlist, or script that will be displayed.  If you want the user's remote control navigation to follow the same path as your end actions, set the media file's end action and the remote's Menu button to the same target destination. If no menu has been displayed, Most recent menu will display the first menu on the disc.
Destination chapter Destination item	When your end action links to a video, music/video compilation, picture compilation, or playlist, choose the specific chapter in the destination file that will be displayed. When your end action links to a menu, choose Start or Loop Point to indicate the point from which the menu will be played. For more information about setting a menu loop point, see "Setting looping points for menus" on page 156.
Destination button	When your end action links to a menu, you can choose the button you want to use as the default selected button in the destination menu. If you choose Default, the first button listed under the menu in the Project Overview window is used as the default.
Set audio track	Choose a setting from the drop-down list to choose which audio track will be played in a destination title. Choose No change to use the last-set track.  If you use the Set audio track control to change the audio track, the new track will be used when you navigate between titles unless another button action, end action, or user action (via the remote control) changes the track. When setting up your project, we recommend using the same track sequence for all videos, picture compilations, and music/video compilations. If necessary, insert empty audio tracks to maintain the track sequence so that the disc will continue to play the same track number when you transition playback between titles. For more information about adding audio tracks, see "Adding audio tracks" on page 132.

Item	Description
Set subtitle track	Choose a setting from the drop-down list to choose which subtitle track will be played in a destination title. Choose Off to turn subtitles off, or choose No change to use the last-set track.  If you use the Set subtitle track control to change the subtitle track, the new track will be used when you navigate between titles unless another button action, end action, or user action (via the remote control) changes the track. When setting up your project, we recommend using the same track sequence for all videos, picture compilations, and music/video compilations. If necessary, insert empty subtitle tracks to maintain the track sequence so that the disc will continue to play the same track number when you transition playback between titles. For more information about adding subtitle tracks, see "Adding subtitles" on page 137.
Set video angle	Choose a setting from the drop-down list to choose which video track will be played in a destination title. Choose No change to use the last-set track.  If you use the Set video angle control to change the video track, the new track will be used when you navigate between titles unless another button action, end action, or user action (via the remote control) changes the track.

Remote Buttons

For each music/video compilation, you can allow or suspend operation of individual buttons on the DVD or Blu-ray Disc remote control and set the behavior of the Menu button.

To turn each button on or off, select the box, click the down arrow button , and choose On or Off from the drop-down list.

Item	Description
Title play	When On is selected, the user can use the Title button on the remote to skip to a specific chapter. When Off is selected, this button is not available.
Stop	When On is selected, the user can press Stop to stop the disc. When Off is selected, this button is not available.
Time/chapter search	When On is selected, the user can use the Time button on the remote to skip to a specific play time or chapter. When Off is selected, this button is not available.

Item	Description
Previous/Up	When On is selected, the user can press the Previous/Up button to navigate to the previous chapter or menu page. When Off is selected, this button is not available.
Next	When On is selected, the user can press the Next button to navigate to the next chapter or menu page. When Off is selected, this button is not available.
Fast scan	When On is selected, the user can press the Fwd button to seek forward through a video, music/video compilation, or picture compilation. When Off is selected, this button is not available.
Backward scan	When On is selected, the user can press the Rev button to seek backward through a video, music/video compilation, or picture compilation. When Off is selected, this button is not available.
Top menu	When On is selected, the user can press the Menu button to return to the disc's top-level menu. When Off is selected, this button is not available.

Item	Description
Menu	When On is selected, the user can press the Menu button during playback. Click the expand button  to expand the Menu controls so you can define the behavior of the Menu button for media files, picture compilations, and music/video compilations.  This item is not available for Blu-ray Disc projects. ■ Command - Determines what happens when the Menu button is pressed while your media file is playing: ○ Link - You can link to any menu, media file, and chapter point. Use the Destination and Destination chapter controls to set the target. ○ Stop - Your disc will stop when the Menu button is pressed. ■ Destination - When Link is selected in the Command drop-down list, choose the menu, media file, or script that will be displayed.  If you want the user's remote control navigation to follow the same path as your end actions, set the media file's end action and the remote's Menu button to the same target destination. If no menu has been displayed, Most recent menu will display the first menu on the disc. ■ Destination chapter - When your button links to a video, music/video compilation, or picture compilation, choose the specific chapter in the destination file that will be displayed. ■ Destination button - When your Menu button links to a menu, you can choose the button you want to use as the default selected button in the destination menu. If you choose Default, the first button listed under the menu in the Project Overview window is used as the default. ■ Set audio track - Choose a setting from the drop-down list to choose which audio track will be played a destination title. Choose No change to use the last-set track. ■ Set subtitle track - Choose a setting from the drop-down list to choose which subtitle track will be played in a destination title. Choose No change to use the last-set track. When Off is selected, this button is not available.

Item	Description
Resume	When On is selected, the user can press the Resume (Menu) button to resume playback of a title after exiting it by pressing the Menu button. When Off is selected, this button is not available.
Button navigation	When On is selected, the user can press the Up/Down/Left Right buttons on the remote to navigate between menu buttons. When Off is selected, the buttons are not available.
Pause	When On is selected, the user can press the Pause button on the remote to temporarily suspend playback. When Off is selected, this button is not available.
Audio track change	When On is selected, the user can press the Audio button on the remote to choose which audio track is played. When Off is selected, this button is not available.
Subtitle track change	When On is selected, the user can press the Subtitle button on the remote to choose which subtitle track is displayed. When Off is selected, this button is not available. This option also removes the user's ability to turn subtitles off while watching the disc.
Video angle change	When On is selected, the user can press the Angle button on the remote to choose which video track is displayed. When Off is selected, this button is not available.
Video mode	When On is selected, the user can press the Video Mode button on the remote to switch widescreen, letterboxed, and pan-and-scan presentation in a 16:9 video. When Off is selected, this button is not available.

Slide

The Slide page of the Properties window displays the settings for the slide selected in the Compilation window.

Item	Description
Video	Displays the path to the image file that will be used. Select the control and click the down arrow button  to display a menu, where you can choose a file, view media properties, crop and adjust media settings, remove the current file, open the file in your specified graphics editor, or explore the file's containing folder on your drive.  You can also change the slide image by dragging a new image from the Explorer window to the Video box or to a song in the Compilation window.
Audio	Displays the path to the audio file that will be used. Select the control and click the down arrow button  to display a menu, where you can choose a file, view media properties, or remove the current file.  You can also change the audio by dragging a new audio file from the Explorer window to the Audio box or to a slide in the Compilation window.
Stretch type	Select the box, click the down arrow button , and choose a setting from the drop-down list to indicate how the image will be scaled to fit the screen. ■ Letterbox - The background media fills the width of the menu, and black letterboxing bars are displayed above and below or to the right and left as needed. ■ Zoom to fit - The background is magnified to fill the menu. If the aspect ratio of the image doesn't match your project's aspect ratio, the image will extend beyond the screen. ■ Stretch to fit - The background is stretched horizontally and vertically to fill the menu. If the aspect ratio of the image doesn't match your project's aspect ratio, the image will be distorted.
Orientation	To rotate the video for the selected song, select the box, click the down arrow button , and choose a setting from the menu.  You can also rotate the image using the Rotate Clockwise  and Rotate Counterclockwise  buttons in the Compilation window.

Color Sets

You can use the Color Sets controls in the Properties window to adjust which color set is used to

draw subtitle text.

You can have four project-wide color sets that are available to every title in your project, and each title in your project can also have up to four custom color sets with four colors each. Each color set includes a fill color, outline/background color, anti-alias color, and transparent color.

For more information about working with color sets, see "[Using color sets](#)" on page 161.

Playlist Properties

You can use the Playlist Properties controls in the Properties window to adjust settings for each item in a playlist or to set the end action for the selected playlist.

To edit a playlist's properties, perform the following actions:

1. If the window isn't already visible, choose Properties from the View menu.
2. Double-click a playlist in the Project Overview window (or navigate in the workspace) to select the playlist you want to edit (or choose a playlist from the drop-down list at the top of the Playlist window).
3. In the Playlist window, click the playlist item you want to edit. The Playlist Properties display in the Properties window.

For more information about creating playlists, see "[Playlists](#)" on page 198.

General

Item	Description
Play mode	Determines the order of play for items in your playlist: ■ Sequential - Plays the items in the order you selected in your playlist. ■ Random - Plays the items in your playlist in a random order.
Infinite	If you selected random playback, the Infinite control determines the number of items to play from your playlist. ■ Yes - Playback includes all items in your playlist, and continues until the disc user makes another selection. ■ No - Playback includes only the number of items you specify in the Count box, which DVD Architect randomly selects from your playlist. Once playback of the specified number of items is complete, the disc returns to the destination specified in the End Action properties.

End Action

Item	Description
Command	Determines what happens after your media file is finished playing: ■ Link – You can link to any menu, media file, and chapter point. Use the Destination and Destination chapter, Destination item, or Destination button controls to set the target. ■ Stop – Your disc will stop after the media file stops.
Destination	When Link is selected in the Command drop-down list, choose the menu, title, playlist, or script that will be displayed.  If you want the user's remote control navigation to follow the same path as your end actions, set the media file's end action and the remote's Menu button to the same target destination. If no menu has been displayed, Most recent menu will display the first menu on the disc.
Destination chapter Destination item	When your end action links to a video, music/video compilation, picture compilation, or playlist, choose the specific chapter in the destination file that will be displayed. When your end action links to a menu, choose Start or Loop Point to indicate the point from which the menu will be played. For more information about setting a menu loop point, see "Setting looping points for menus" on page 156.
Destination button	When your end action links to a menu, you can choose the button you want to use as the default selected button in the destination menu. If you choose Default, the first button listed under the menu in the Project Overview window is used as the default.

Item	Description
Set audio track	Choose a setting from the drop-down list to choose which audio track will be played in a destination title. Choose No change to use the last-set track.  If you use the Set audio track control to change the audio track, the new track will be used when you navigate between titles unless another button action, end action, or user action (via the remote control) changes the track. When setting up your project, we recommend using the same track sequence for all videos, picture compilations, and music/video compilations. If necessary, insert empty audio tracks to maintain the track sequence so that the disc will continue to play the same track number when you transition playback between titles. For more information about adding audio tracks, see "Adding audio tracks" on page 132.
Set subtitle track	Choose a setting from the drop-down list to choose which subtitle track will be played in a destination title. Choose Off to turn subtitles off, or choose No change to use the last-set track.  If you use the Set subtitle track control to change the subtitle track, the new track will be used when you navigate between titles unless another button action, end action, or user action (via the remote control) changes the track. When setting up your project, we recommend using the same track sequence for all videos, picture compilations, and music/video compilations. If necessary, insert empty subtitle tracks to maintain the track sequence so that the disc will continue to play the same track number when you transition playback between titles. For more information about adding subtitle tracks, see "Adding subtitles" on page 137.
Set video angle	Choose a setting from the drop-down list to choose which video track will be played in a destination title. Choose No change to use the last-set track.  If you use the Set video angle control to change the video track, the new track will be used when you navigate between titles unless another button action, end action, or user action (via the remote control) changes the track.

Playlist Item

The Playlist Item page of the Properties window displays the settings for the item selected in the Playlists window.

Item	Description
Start chapter	Choose a chapter from the drop-down list to choose where playback will begin when the selected title is played in the selected playlist.
Set audio track	Choose a setting from the drop-down list to choose which audio track will be played when the selected title is played in the selected playlist. Choose No change to use the last-set track.
Set subtitle track	Choose a setting from the drop-down list to choose which subtitle track will be played when the selected title is played in the selected playlist. Choose No change to use the last-set track.
Set video angle	Choose a setting from the drop-down list to choose which video track will be played when the selected title is played in the selected playlist. Choose No change to use the last-set track.  If you use the Set video angle control to change the video track, the new track will be used when you navigate between titles unless another button action, end action, or user action (via the remote control) changes the track.

Script Properties

You can use the Script Properties controls in the Properties window to adjust settings for each statement in your DVD script.

 Scripting is not available for Blu-ray Disc projects.

To edit a script's properties, perform the following actions:

1. If the window isn't already visible, choose Properties from the View menu.
2. Double-click a DVD script in the Project Overview window (or navigate in the workspace) to select the script you want to edit (or choose a script from the drop-down list at the top of the DVD Scripts window).
3. In the DVD Scripts window, click the statement you want to edit. The Script Properties display in the Properties window.

For more information about creating DVD scripts, see "[Using scripting](#)" on page 216.

Command

Command statement types determine what happens at this step in the script. You can use commands to assign values or set links to a GPRM, skip to other sections of the script, set the audio, video, and subtitle tracks, resume or stop playback, and more. Optionally, you can also set specific conditions that must be present for these commands to be executed.

To create a command statement, choose Command from the Statement type drop-down list. Choose the type of command from the Command drop-down list:

Item	Description
Nop	No operation is currently invoked in this command. This is the default setting for all commands. A Nop command is ignored by the script.
Link	Links to a title or menu on your DVD. ■ Destination - When Link is selected in the Command drop-down list, choose the menu, title, playlist, or script that will be displayed. ■ Destination chapter - When your statement links to a video, music/video compilation, or playlist, choose the specific chapter that will be displayed. ■ Destination button - When your statement links to a menu, choose the button you want to use as the default selected button in the destination menu.
GotoLabel	Links to a label elsewhere in the current script. When the script is run, it will begin executing statements listed after the label. Choose a setting from the Label drop-down list to select the label to which you want to link. For more information about creating labels, please see the next section in this topic.
Set GPRM	Assigns a value or asset to a GPRM. ■ Target - Sets the GPRM you want to use for this asset (0-5). ■ Operator - Modifies the target's value. There are 11 operators from which to choose. ■ Source - Sets the source (SPRM, GPRM, value, or link, depending upon the operator you selected) for the command. Use the controls below to choose the SPRM or GPRM index, the numeric value, or the link destination.
Link GPRM	Links to the specified GPRM. For example, you can assign a GPRM to a link using the Set GPRM command, and then use the Link GPRM command to execute the link in your script.
SetMode GPRM	Sets the specified GPRM to either register or counter mode. ■ Target - Sets the GPRM you want to use for this command (0-5). ■ Mode - Sets the mode (counter or register) for the command.

Item	Description
SetStreams	Sets the audio or subtitle track or the video angle. ■ Set audio track - Choose a setting from the drop-down list to select which audio track will be played. Choose No change to use the last-set track. ■ Set subtitle track - Choose a setting from the drop-down list to select which subtitle track will be played. Choose No change to use the last-set track. ■ Set video angle - Choose a setting from the drop-down list to select which video track will be played. Choose No change to use the last-set track.
Resume	Resume playback at the specified destination. In the Destination drop-down list, choose the media file that will be accessed.
Stop	Stop playback. You can also specify that playback is stopped only if the specified conditions are met. For more information about conditions, please see below.

Next, you can set the conditions that must be present for the command to execute:

Item	Description
Condition	■ None - No conditions must be met; the command will always execute as specified in the Command drop-down list. ■ < - Smaller. The command will be executed if the specified GPRM is smaller than the specified right operand item. ■ <= - Less than or equal. The command will be executed if the specified GPRM is less than or equal to the specified right operand item. ■ = - Equal. The command will be executed if the specified GPRM is equal to the specified right operand item. ■ >= - Greater or equal. The command will be executed if the specified GPRM is greater than or equal to the specified right operand item. ■ > - Greater. The command will be executed if the specified GPRM is greater than the specified right operand item. ■ != - Not equal. The command will be executed if the specified GPRM is not equal to the specified right operand item. ■ & - And. The script performs a bitwise AND comparison. If the result of the bitwise AND comparison is 0, then the condition is false and the command is not executed. If the result of the bitwise AND comparison is anything other than 0, then the condition is true and the command is executed.
Left operand	Choose the GPRM you want to use for this condition (0-5).
Right operand	Choose the right operand item you want to use for this condition: ■ SPRM - Choose the SPRM variable to compare to your specified GPRM in the left operand. ■ GPRM - Choose the GPRM to compare to your specified GPRM in the left operand. ■ Value - Choose the numeric value to compare to your specified GPRM in the left operand.

Label

A label statement type inserts a label in the script. Labels can be used to mark sections of a script to which you want to link.

To create a label statement, choose Label from the Statement type drop-down list. In the Label box, type the text you want to display in the label.

Once you've set a label statement, you can create a GoToLabel command to link from one section of a script to another using your defined label, and the script will begin executing the statements after the label.



Notes:

- When you set a GotoLabel command, this label will display as an option in the Label control drop-down list.
- Label statements can only be used to link within a script; links from one script to a label in another script are not supported.

Comment

The Comment statement type inserts a comment in the script. Comments are ignored by the script and not seen by the DVD viewer, but you can use them during the script building and testing process to organize your script or add information.

To insert a comment statement, choose Comment from the Statement type drop-down list. In the Comment box, type the text you want to display in the comment.

Using DVD Architect Software

The basic process for creating a DVD or Blu-ray Disc is essentially the same regardless of the type of project you choose to create.

1. [Start](#) a new project and specify the type of project you want to create (menu based, music/video compilation, picture compilation, or single movie).
2. Choose and [add](#) your media.
3. [Preview](#) your project.
4. [Save](#) your project.
5. [Prepare and burn](#) your project.

Rendering files for your project

To ensure that your project preparation and burning process goes smoothly, you should attempt to save your media files in the supported formats prior to bringing them into your DVD Architect™ Pro project. DVD Architect software supports a wide variety of file formats, but some will require transcoding or recompression by the project-preparation process, lengthening the amount of time needed to complete this operation, and possibly resulting in degradation of quality.

 The AVC, MainConcept MPEG-2, AC-3, and Wave/Wave64 encoders provide templates that, if used without any modifications, result in files that do not require any recompression (unless the file size is too large to fit on a disc).

The settings to produce media files that do not require recompression follow.

Media file settings for Blu-ray Disc projects

You can burn Blu-ray Disc projects to BD recordable discs using the BDMV format:

- A 25 GB single-layer BD recordable disc can store approximately 3 hours, 42 minutes of AVC video (15 Mbps) or 2 hours, 15 minutes of MPEG-2 video (25 Mbps).
- A 50 GB dual-layer BD recordable disc can store approximately 7 hours, 25 minutes of AVC video (15 Mbps) or 4 hours, 31 minutes of MPEG-2 video (25 Mbps).

AC-3 audio (.ac3)

Sample Rate	Bit Rate	Channels
48,000 Hz	192 Kbps (64 Kbps to 640 Kbps is supported)	Stereo
48,000 Hz	192 Kbps (64 Kbps to 640 Kbps is supported)	5.1 surround

PCM audio (.wav or .w64)

Sample Rate	Bit Depth	Channels	Compression
48,000 Hz	16 or 24 bit	Stereo	Uncompressed
96,000 Hz	16 or 24 bit	Stereo	Uncompressed

AVC video

If you're using Vegas Pro software, you can use the AVCHD rendering templates to render a compliant video file including 5.1 surround AC-3 audio.

Template Name	Frame Size	Frame Rate	Aspect Ratio	Max. Bit Rate
AVCHD NTSC 5.1 Surround	1440x1080	29.970 fps	16:9	40 Mbps
AVCHD PAL 5.1 Surround	1440x1080	25 fps	16:9	40 Mbps

If you're rendering with a different application, the following settings will produce compliant AVC media.

Frame Size	Frame Rate (fps)	Aspect Ratio	Max. Bit Rate
720x480	29.970 interlaced	4:3	40 Mbps
720x480	29.970 interlaced	16:9	40 Mbps
720x576	25 interlaced	4:3	40 Mbps
720x576	25 interlaced	16:9	40 Mbps
1280x720	29.970 interlaced	16:9	40 Mbps
1280x720	50	16:9	40 Mbps
1280x720	24.000	16:9	40 Mbps
1280x720	23.976	16:9	40 Mbps
1440x1080	29.970 interlaced	16:9	40 Mbps
1440x1080	25 interlaced	16:9	40 Mbps
1440x1080	24.000	16:9	40 Mbps
1440x1080	23.976	16:9	40 Mbps
1920x1080	29.970 interlaced	16:9	40 Mbps
1920x1080	25 interlaced	16:9	40 Mbps
1920x1080	24.000	16:9	40 Mbps
1920x1080	23.976	16:9	40 Mbps

MPEG-2 video

If you're using Vegas Pro software, you can use the Blu-ray rendering templates to render your video stream. You'll need to render your audio stream separately according to the parameters listed in the AC-3 audio or PCM audio headings in this help topic.

Template Name	Frame Size	Frame Rate (fps)	Aspect Ratio	Maximum Group of Pictures	Max. Bit Rate
Blu-ray 1920x1080-24p, 25 Mbps video stream	1920x1080	23.976	16:9	24	40 Mbps
Blu-ray 1920x1080-50i, 25 Mbps video stream	1920x1080	25	16:9	25	40 Mbps
Blu-ray 1920x1080-60i, 25 Mbps video stream	1920x1080	29.970	16:9	30	40 Mbps

Template Name	Frame Size	Frame Rate (fps)	Aspect Ratio	Maximum Group of Pictures	Max. Bit Rate
Blu-ray 1440x1080-24p, 25 Mbps video stream	1440x1080	23.976	16:9	24	40 Mbps
Blu-ray 1440x1080-50i, 25 Mbps video stream	1440x1080	25	16:9	25	40 Mbps
Blu-ray 1440x1080-60i, 25 Mbps video stream	1440x1080	29.970	16:9	30	40 Mbps
Blu-ray 1440x1080-24p, 8 Mbps video stream	1440x1080	23.976	16:9	24	40 Mbps
Blu-ray 1440x1080-50i, 8 Mbps video stream	1440x1080	25	16:9	25	40 Mbps
Blu-ray 1440x1080-60i, 8 Mbps video stream	1440x1080	29.970	16:9	30	40 Mbps

If you're rendering with a different application, the following settings will produce compliant MPEG-2 video stream.

Frame Size	Frame Rate (fps)	Aspect Ratio	Maximum Group of Pictures	Max. Bit Rate
720x480	29.970 interlaced	4:3	30	40 Mbps
720x480	29.970 interlaced	16:9	30	40 Mbps
720x576	25 interlaced	4:3	25	40 Mbps
720x576	25 interlaced	16:9	25	40 Mbps
1280x720	29.970 interlaced	16:9	60	40 Mbps
1280x720	50	16:9	50	40 Mbps
1280x720	24.000	16:9	24	40 Mbps
1280x720	23.976	16:9	24	40 Mbps
1440x1080	29.970 interlaced	16:9	30	40 Mbps
1440x1080	25 interlaced	16:9	25	40 Mbps
1440x1080	24.000	16:9	24	40 Mbps
1440x1080	23.976	16:9	24	40 Mbps
1920x1080	29.970 interlaced	16:9	30	40 Mbps
1920x1080	25 interlaced	16:9	25	40 Mbps
1920x1080	24.000	16:9	24	40 Mbps
1920x1080	23.976	16:9	24	40 Mbps

Media file settings for DVD projects

You can burn DVD projects to single- and dual-layer DVDs:

- A 4.7 GB single-layer DVD recordable disc can store over two hours of MPEG-2 video.
- An 8.5 GB dual-layer DVD recordable disc can store approximately 4 hours of MPEG-2 video.

AC-3 audio (.ac3)

Sample Rate	Bit Rate	Channels
48,000 Hz	192 Kbps (64 Kbps to 640 Kbps is supported)	Stereo
48,000 Hz	448 Kbps (64 Kbps to 640 Kbps is supported)	5.1 surround

PCM audio (.wav or .w64)

Sample Rate	Bit Depth	Channels	Compression
48,000 Hz	16, 20, or 24 bit	Stereo	Uncompressed
96,000 Hz	16, 20, or 24 bit	Stereo	Uncompressed

NTSC MPEG video (.m2p, .mp2, .mpg, .mpeg, .mpv)

If you're using the MainConcept MPEG-2 encoder in Vegas Pro software, use the DVD Architect NTSC video stream or DVD Architect 24p NTSC video stream template to render your video stream. You'll need to render your audio stream separately according to the parameters listed in the AC-3 audio or PCM audio headings in this help topic.

Template Name	Frame Size	Frame Rate (fps)	Aspect Ratio	Maximum Group of Pictures	Max. Bit Rate
DVD Architect NTSC video stream	720x480	29.970	4:3	36	9.8 Mbps
DVD Architect NTSC widescreen video stream	720x480	29.970	16:9	36	9.8 Mbps

If you're rendering with a different application, the following settings will produce a compliant NTSC MPEG-2 video stream.

Frame Size	Frame Rate (fps)	Aspect Ratio	Maximum Group of Pictures	Max. Bit Rate
720x480	29.97 or 23.976 + 2-3 pulldown	4:3	36	9.8 Mbps
704x480	29.97 or 23.976 + 2-3 pulldown	4:3	36	9.8 Mbps
352x240	29.97 or 23.976 + 2-3 pulldown	4:3	36	9.8 Mbps
352x480	29.97 or 23.976 + 2-3 pulldown	4:3	36	9.8 Mbps

Frame Size	Frame Rate (fps)	Aspect Ratio	Maximum Group of Pictures	Max. Bit Rate
720x480	29.97 or 23.976 + 2-3 pulldown	16:9	36	9.8 Mbps
720x480	29.97 or 23.976 + 2-3 pulldown	16:9	36	9.8 Mbps

 The MainConcept MPEG-2 encoder in Vegas Pro renders with the Low Delay flag turned off. If you're rendering with a different encoder, ensure Low Delay is turned off.

PAL MPEG video (.m2p, .mp2, .mpg, .mpeg, .mpv)

If you're using the MainConcept MPEG-2 encoder in Vegas Pro software, use the DVD Architect PAL video stream or DVD Architect PAL Widescreen video stream template to render your video stream. You'll need to render your audio stream separately according to the parameters listed in the AC-3 audio or PCM audio headings in this help topic.

Template Name	Frame Size	Frame Rate (fps)	Aspect Ratio	Maximum Group of Pictures	Max. Bit Rate
DVD Architect PAL video stream	720x576	25	4:3	30	9.8 Mbps
DVD Architect PAL widescreen video stream	720x576	25	16:9	30	9.8 Mbps

If you're rendering with a different application, the following settings will produce a compliant PAL MPEG-2 video stream.

Frame Size	Frame Rate	Aspect Ratio	Maximum Group of Pictures	Max. Bit Rate
704x576	25 fps	4:3	30	9.8 Mbps
352x576	25 fps	4:3	30	9.8 Mbps
352x288	25 fps	4:3	30	9.8 Mbps
704x480	25 fps	16:9	30	9.8 Mbps

 The MainConcept MPEG-2 encoder in Vegas Pro renders with the Low Delay flag turned off. If you're rendering with a different encoder, ensure Low Delay is turned off.

Working with projects

A DVD Architect™ Pro project (.dar) file saves the relevant information about your source media: file locations, insertion points, and where you used each file.

A project file is not a multimedia file. It contains pointers to the original source files, so you can edit your project nondestructively – you can be creative without worrying about corrupting your source files.

Creating a new project

From the File menu, choose New. You'll be prompted to choose the type of disc you want to create and enter information about your project on the New Project dialog.

If you have an unsaved project open, you will be prompted to save your changes first.

 Click the New button  on the toolbar (or hold the Shift key while choosing New from the menu) to skip the New Project dialog and use the default project settings.

 If you have a display device that is susceptible to burn-in (such as a rear-projection television), do not use static text or bright static graphics in any scene that will be displayed on screen for an extended period of time.

Choosing the type of project you want to create

The Project tab in the New Project dialog allows you to choose the type of disc you want to create and choose its destination format.

1. From the File menu, choose New.
2. Select the General tab.

3. Click an icon to choose a project type:

Item	Description
 Menu Based	Creates a disc that displays a menu when it is played in a DVD or Blu-ray Disc player. You can add any type of media files to the disc, and the user will use your menus to navigate to the media. A menu-based project can contain multiple menus, movies, music/video compilations, and picture compilations.
 Music/Video Compilation	Creates a disc that contains a compilation of audio or video tracks. A still image can be displayed for each audio track, but there are no menus on the disc.
 Picture Compilation	Creates a disc that contains a series of images. You can include a background audio track, but there are no menus on the disc.
 Single Movie	Creates a disc that contains a single movie file. There are no menus on the disc.

4. Choose a setting from the Disc format drop-down list to determine the final disc format to which your project will be output: DVD or Blu-ray Disc.
5. Choose a setting from the Project video format drop-down list. The video format determines the following information about your project:
 - Whether a disc is NTSC or PAL. You cannot use both NTSC and PAL content on the same disc.
 - The default frame size and aspect ratio for media that will be recompressed. You can use the Optimize Disc dialog to choose distinct recompression settings for each media file. For more information, see "[Optimizing your project](#)" on page 119.
 - The frame size and aspect ratio of all menus. All menus must use the same aspect ratio and resolution.
6. Choose a setting from the Project audio format drop-down list to determine the format that will be used for audio that will be recompressed. You select a title and use the Audio settings in the Optimize Disc dialog to choose distinct recompression settings for each media file.
7. Select the Start all new projects with these settings check box if you want to use the current settings every time you create a new project.

Entering summary information about your project

The information on the Summary tab in the New Project dialog is saved with your project and can be used to store information about the project.

1. From the File menu, choose New.
2. Select the Summary tab.

Item	Description
Title	Enter the title of the project.
Artist	Enter the name of the artist who performed in the project.
Engineer	Enter the name of the person who mixed or edited the project.
Copyright	Enter copyright information about the project.
Comments	Enter any comments you want to associate with the project.
Start all new projects with these settings	Select this check box to use the current dialog settings as the default.

Setting project properties

Use the Project Properties dialog to edit your project's video format, choose a media file to play before the main menu, and edit summary information.

From the File menu, choose Properties to display the dialog.

The Properties tab contains general settings for your disc, copy protection settings, region information, and mastering settings. The Summary tab contains general information about your project.



Select the Start all new projects with these settings check box to use the current settings whenever a new project is created.

Setting disc properties

1. From the File menu, choose Properties.
2. Click the Properties tab.
3. Click the Disc Properties button.
4. Adjust the settings as needed:

Item	Description
Disc format	Choose a setting from the drop-down list to indicate whether you want to create a Blu-ray Disc project or a DVD project.

Item	Description
Target media size	Choose a setting from the drop-down list to specify the capacity of your disc media. This setting will be used to calculate how much space is available on the disc. If you want to burn a Blu-ray Disc project to DVD media, choose 8.50 or 4.70.  You can also change this setting by right-clicking the free space display in the bottom-right corner of the DVD Architect window and choosing a command from the shortcut menu.
Video defaults	Displays the default video settings for your project. You can use the controls below the Video defaults row to adjust the settings. The default video format determines the following information about your project: ■ Whether a disc is NTSC or PAL. You cannot use both NTSC and PAL content on the same disc (DVD projects only). ■ The default frame size and aspect ratio for media that will be recompressed. You can use the Optimize Disc dialog to choose distinct recompression settings for each media file. For more information, see "Optimizing your project" on page 119. ■ The frame size and aspect ratio of all menus. All menus must use the same aspect ratio and resolution.  The television frame rate in the US, North and Central America, parts of South America, and Japan (NTSC) is 29.97 frames per second (fps). In many parts of the world, including Europe and much of Asia, the television standard is PAL at 25 fps. France, Russia, and most of Eastern Europe use SECAM, which is a variation on PAL and also uses 25 fps.
Video format	If you're creating a DVD project, the video format is always MPEG-2. If you're creating a Blu-ray Disc project, you can choose whether you want to use MPEG-2 or AVC video.

Item	Description
Bit rate (Mbps)	Select the control, click the down arrow button , and drag the slider to adjust the size of your project: ■ 9.8 Mbps is the maximum bit rate for DVD players. ■ 28 Mbps is the maximum bit rate for Blu-ray Disc projects burned to DVD media. ■ 48 Mbps is the maximum bit rate for Blu-ray Disc projects burned to Blu-ray media. Increasing the bit rate can improve quality, but you can fit less media on the disc. Decreasing the bit rate can allow you to fit more video on the disc, but quality will be decreased.
Aspect ratio	Select the control, click the down arrow button , and choose a setting to indicate whether you want to create a standard-aspect (4:3) or widescreen (16:9) project.
Resolution	Select the control, click the down arrow button , and choose a setting to adjust the resolution of your project: ■ 720x480. ■ 720x576. ■ 1280x720. ■ 1440x1080. ■ 1920x1080.
Frame rate	Select the control, click the down arrow button , and choose a setting to indicate the default frame rate for your project. The television frame rate in the US, North and Central America, parts of South America, and Japan (NTSC) is 29.970 frames per second (fps). In many parts of the world, including Europe and much of Asia, the television standard is PAL at 25.000 fps. France, Russia, and most of Eastern Europe use SECAM, which is a variation on PAL and also uses 25.000 fps.
Progressive	Indicates whether the selected frame rate is a progressive-scan format.

Item	Description
Audio defaults	Displays the default audio settings for your project. You can use the controls below the Audio defaults row to adjust the settings that will be used for audio that will be recompressed. You can select a title and use the Audio settings in the Optimize Disc dialog to choose distinct recompression settings for each media file. For more information, see "Optimizing your project" on page 119.
Audio format	Select the control, click the down arrow button , and choose a setting to indicate the format whether you want to use PCM Stereo audio, AC-3 Stereo audio, or AC-3 5.1-surround audio.
Bit rate (AC-3 only)	If your audio format is AC-3, select the control, click the down arrow button , and choose a setting to indicate the bit rate for your audio. ■ DVD projects can use a bit rate of 96 Kbps to 448 Kbps. ■ Blu-ray Disc projects can use a bit rate of 96 Kbps to 640 Kbps.
Bit depth (PCM only)	If your audio format is PCM, select the control, click the  button, and choose a setting to indicate the number of bits used to represent each audio sample.
Sample rate (PCM only)	If your audio format is PCM, select the control, click the  button, and choose a setting to indicate the sample rate for your audio. ■ DVD projects can use a sample rate of 48 KHz or 96 KHz. ■ Blu-ray Disc projects can use a sample rate of 48 KHz, 96 KHz, or 192 KHz.
Last prepare folder	Displays the path to the most recently used folder that was used to prepare your project.
Last mastering output folder	Displays the path to the most recently used folder that was used to master your project.
Last prepare image	Displays the path to the .iso file that was created the last time you prepared a Blu-ray Disc project.

Item	Description
Initial audio track	If you want to specify the initial audio track that will be used when your disc is played in a DVD or Blu-ray Disc player, click the box and choose an audio track from the drop-down list. If you choose Default, the player will attempt to determine the appropriate default audio track. If the player cannot determine the correct language, the first track is used. If multiple tracks match the player's language setting (if you have an English dialogue track and an English commentary track, for example) the first track that matches the player's language is used. The viewer can choose which track is played during playback.  If you choose a track that does not exist in your project, the initial track will default to the first audio track.
Initial subtitle track	If you want to specify the initial subtitle track that will be used when your disc is played in a DVD or Blu-ray Disc player, click the box and choose a subtitle track from the drop-down list. If you choose Default, the player will attempt to determine the appropriate default track. If the player cannot determine the correct language, the first track is used. If multiple tracks match the player's language setting, the first track that matches the player's language is used. The viewer can choose which track is played during playback.  If you choose a track that does not exist in your project, the initial track will default to the first subtitle track.
Initial video angle	If you want to specify the initial video track that will be used when your disc is played in a DVD or Blu-ray Disc player, click the box and choose a video track from the drop-down list. If you choose Default, the player will attempt to determine the appropriate default track. The viewer can choose which track is played during playback.  If you choose a track that does not exist in your project, the initial track will default to the first video track.
DVD-only features	The Extras folder, Jacket picture, DVD start script, and Parental control settings are available only when creating a DVD project.

Item	Description
Extras folder	If you want to burn DVD-ROM content to your disc, type the path to the folder that contains the files you want to include (or select the box and click the Change Media button  to choose a folder). When you choose a folder, all files within that folder will be written to the root of your disc. If you want to place the content in a subfolder at the root of the disc, create a subfolder within your specified extras folder: ■ For example, if c:\media\extras\ is your extras folder, all files within c:\extras will be written to the root of the disc. ■ For example, if c:\media\extras\ is your extras folder, you could place the files you want to burn in a c:\media\extras\DVD-ROM subfolder so that DVD-ROM folder and its contents would be written to the root of the disc. You can add any type of files or subfolders to the Extras folder, but this content will only be available when browsing the disc on a computer. Click the Change Media button  to browse to a folder. Click the Clear Media button  to remove a folder.  This feature is not available for Blu-ray Disc projects.
Jacket picture	The jacket picture feature allows you to display a still image that will display when the Stop button has been pressed on the remote control. Commercially produced discs often use an image of the disc cover (hence the name), but you can use any image. Click the Change Media button  to browse to a folder. Click the Clear Media button  to remove a folder.  Notes: ■ This feature is not available for Blu-ray Disc projects. ■ Not all DVD players can display jacket pictures.

Item	Description
DVD start script	If you want to specify the start script that will be executed when your disc is played in a DVD player, click the box and choose an available script from the drop-down list. If you have not yet created any scripts, the only available option will be None.  Notes: ■ This feature is not available for Blu-ray Disc projects. ■ The start script will execute prior to any item designated as the start item in your project.
Parental control	You can restrict the disc's playback by selecting the parental controls (ratings) set by the Motion Picture Association of America (MPAA): ■ Off - There are no parental controls. ■ 1 (G) - General audiences. All ages may watch the content. ■ 2 ■ 3 (PG) - Parental guidance suggested. Some content may not be suitable for children. ■ 4 (PG-13) - Parents strongly cautioned. Some content may be inappropriate for children under age 13. ■ 5 ■ 6 (R) - Restricted. No children under age 17 should watch this content without a parent or adult guardian present. ■ 7 (NC-17) - No one age 17 and under should watch the content. ■ 8  This feature is not available for Blu-ray Disc projects.

Item	Description
Disc Labels	This is optional information that could be included in the disc file system: ■ Application ID - Identifies the application. DVD Architect is the default entry. ■ Volume Name - Enter the disc volume name.  The volume name is limited to 32 characters and can only contain capital letters (A-Z), digits (0-9), and underscore (_). DVD Architect will automatically correct text that does not comply with these rules. ■ Volume Set Name - Enter the name of a set of volumes.  The volume set name is limited to 59 characters.

Editing copy protection settings

You can use the controls on the Copy Protection tab to secure DVD content.

 Copy protection settings are not used for Blu-ray Disc projects.

1. From the File menu, choose Properties.
2. Click the Properties tab.
3. Click the Copy Protection button.
4. Adjust the settings as needed:

 DVD Architect software sets the flags for CSS and Macrovision copy protection; the encoding/encryption must be added by the mastering or replication facility.

Item	Description
Disc copyrighted	Choose Yes from the drop-down list if your project contains copyrighted material. You can then set the number of allowed copy generations and whether you want to set CSS and Macrovision copy-protection flags. Choose No if your project does not contain copyrighted material. When No is selected, you cannot set the number of allowed copy generations or use CSS or Macrovision.

Item	Description
Copy generations (CGMS)	If you chose Yes from the Disc copyrighted drop-down list, you can use the Copy generations drop-down list to set a flag that indicates whether you want to allow your disc to be copied by recorders and some personal video recorders (PVRs): ■ Unlimited - There is no limit on the number of copies that can be made; the disc can be copied, and those copies can be copied. ■ One - Single-generation copies can be made; the disc can be copied, but those copies cannot be copied. ■ None - No copies can be made. If you choose None, you can optionally use CSS and Macrovision protection.  The CGMS (content generation management system) protection flag may not be recognized by all PVRs or personal computers.
CSS	Choose a setting from the drop-down list to set the CSS (Content Scramble System) flag on your disc. ■ On - Sets a flag that tells the disc replication facility to apply CSS digital encryption to the disc to prevent duplication. ■ Off - Sets a flag the indicates that CSS digital encryption should not be applied during replication. For more information about CSS, please refer to the DVD Copy Control Association website at http://www.dvcca.org/.
Macrovision	Choose a setting from the drop-down list to set the Macrovision Analog Copy Protection (ACP) system flag on your disc. ■ Off - Sets a flag that tells the disc replication facility that Macrovision copy protection should not be encoded. ■ Type I - Sets a flag that tells the replication facility to add Automatic Gain Control (AGC). AGC adds pulses during the vertical blanking intervals that distort the picture when a user attempts to make an analog copy. ■ Type II - Sets a flag that tells the replication facility to add AGC and a two-line Colorstripe™. ■ Type III - Sets a flag that tells the replication facility to add AGC and a four-line Colorstripe. For more information about Macrovision, please refer to the Macrovision website at http://www.macrovision.com/.

Editing region settings

You can use the settings on the Regions tab to determine the regions in which a DVD can be played. Region coding is how Hollywood studios stagger movie releases across the planet. These codes ensure that a disc isn't released before the movie is out in that country's theaters.

 Region settings are not used in Blu-ray Disc projects.

1. From the File menu, choose Properties.
2. Click the Properties tab.
3. Click the Regions button.
4. Adjust the settings as needed:

Item	Description
All regions	Choose Yes from the drop-down list if you want to be able to play your disc in any player regardless of geographical location. Choose No if you want to be able to allow or prevent playback for specific regions.
Region 1	Allows or prevents playback of your disc in the United States, its territories, and Canada.
Region 2	Allows or prevents playback of your disc in Europe, Japan, the Middle East, Egypt, South Africa, and Greenland.
Region 3	Allows or prevents playback of your disc in Southeast Asia and Hong Kong.
Region 4	Allows or prevents playback of your disc in Australia, New Zealand, Mexico, South America, Central America, the Pacific Islands, and the Caribbean.
Region 5	Allows or prevents playback of your disc in Northwest Asia (including Korea) and North Africa.
Region 6	Allows or prevents playback of your disc in China.
Region 7	Region 7 is reserved.
Region 8	Allows or prevents playback of your disc in in-flight entertainment systems.

Editing mastering settings

You can use the settings on the Mastering tab to adjust settings for creating a disc master for replication. For more information, see "[Writing a DVD master for replication](#)" on page 236.

 Mastering is not available for Blu-ray Disc projects.

1. From the File menu, choose Properties.
2. Click the Properties tab.

3. Click the Mastering button.
4. Adjust the settings as needed:

Item	Description
Output format	Multiple output formats give you the flexibility to master your disc according to your replicator's requirements. Choose a setting from the drop-down list to indicate the file format used for writing master files: ■ DDP 2.00 - DDP (Disc Description Protocol) 2.00 is widely supported by replication facilities. This format supports CSS copy protection and region coding. ■ DDP 2.10 - Similar to DDP 2.00, but slightly more advanced. This format supports CSS copy protection and region coding. ■ CMF 1.0 - CMF (Cutting Master Format) supports CSS and region coding.
DVD-ROM type	Choose the type of DVD-ROM you are mastering: ■ DVD-1 (1.4 G) - 8-cm, single-sided, single-layer DVD with a capacity of approximately 1.4 GB. ■ DVD-2 (2.7 G) - 8-cm, single-sided, single-layer DVD with a capacity of approximately 2.7 GB. ■ DVD-3 (2.9 G) - 8-cm, double-sided, single-layer DVD with a capacity of approximately 2.9 GB. ■ DVD-4 (5.3 G) - 8-cm, double-sided, double-layer DVD with a capacity of approximately 5.3 GB. ■ DVD-5 (4.7 G) - 12-cm, single-sided, single-layer DVD with a capacity of approximately 4.7 GB. ■ DVD-9 (8.5 G) - 12-cm, single-sided, double-layer DVD with a capacity of approximately 8.5 GB. ■ DVD-10 (9.4 G) - 12-cm, double-sided, single-layer DVD with a capacity of approximately 9.4 GB. ■ DVD-18 (17 G) - 12-cm, double-sided, double-layer DVD with a capacity of approximately 17 GB.
Number of sides	Choose a setting from the drop-down list to indicate whether you are burning a one-sided or two-sided disc.
Current side	If you chose 2 from the Number of sides drop-down list, choose a setting from the drop-down list to indicate which side you're currently creating master files for.

Item	Description
Number of layers	Choose 1 from the drop-down list if your project will be burned to a single-layer disc. Choose 2 if your project will be burned to a dual-layer disc.
Direction of translation	If you chose 2 from the Number of layers drop-down list, choose a setting from the drop-down list to indicate the direction that second layer of the disc will be read (the first layer is always read from the inner radius to the outer radius). ■ Parallel track path - Read from the inner radius of the disc to the outer radius. When the laser reaches the end of the first layer, it must move back to the inner radius and then refocus on the second layer.  Parallel track path is supported only for creating a master. When you use parallel track path, the layer break must occur at the beginning of a title (inter-title breaks are not allowed). All dual-layer discs burned with DVD Architect software must use opposite track path. ■ Opposite track path - Read from the inner radius of the disc to the outer radius on the first layer and from the outer radius to the inner radius of the second layer.  Notes: ○ This setting is available only when the specified number of layers is 2. ○ The first layer is always read from the inner radius of the disc to the outer radius.
Disc diameter	Choose a setting from the drop-down list to indicate the size of the disc you want the replication facility to use for your project.
Advanced	The DVD-ROM capacity (sectors) field allows you to adjust the number of sectors on the DVD-ROM to match manufacturing requirements. Click in the field and move the slider left or right to decrease or increase the sector capacity.

Item	Description
Customer information	Choose Include if you want to include additional information with the master, or choose Omit if you don't want to include this information.  Notes: ■ The DDP 2.00 output format does not support customer information. ■ Customer information is optional when using the DDP 2.10 output format. ■ The CMF 1.0 output format requires customer information. You can, however, save blank customer information fields with the master.
Content owner	The owner or copyright holder of the media contained on the disc.
Content category	Type up to eight letters to identify the contents of the disc.
Disc ID	Type a unique identifier for the disc. This ID is for use by the content owner and can use any format.
Title name	The title of the disc.
Customer	Information about the customer for whom the disc is being produced.
Authoring studio	Information about the studio that created the contents of the disc.
Disc set number	If the disc is from a multidisc collection, use this setting to identify the disc. For example, if this disc is part two of a three-part series, type 2 in this box.
Maximum set number	If the disc is from a multidisc collection, use this setting to identify the number of discs in the series. For example, if this disc was part of a three-part series, type 3 in this box.
Memo	Type any additional comments here.

Editing summary information

The information on the Summary tab is saved with your project and can be used to store information about the project.

Item	Description
Title	Enter the title of the project.
Artist	Enter the name of the artist who performed in the project.
Engineer	Enter the name of the person who mixed or edited the project.
Copyright	Enter copyright information about the project.
Comments	Enter any comments you want to associate with the project.
Start all new projects with these settings	Select this check box to use the current dialog settings as the default.

Opening a project

From the File menu, choose Open to display the Open dialog. From this dialog, you can browse all of the available drives to open an existing DVD Architect project.

If you choose to open a project without saving the current project, you will be prompted to save your changes first.

1. From the File menu, choose Open. The Open dialog is displayed.
2. Choose the folder where the file you want to open is stored:
 - Choose a drive and folder from the Look in drop-down list.
 - Use the browse window to navigate to the folder.
3. Select a file in the browse window or type a name in the File name box.
4. Click the Open button.



If media files cannot be located when you open a project, you can choose to leave the media offline and continue to edit your project. If you restore the source media file at a later time, the project will open normally.

Optimizing your project

From the File menu, choose Optimize Disc to view and adjust format settings for your project and for individual media assets.

The dialog lists each menu and media file in your project and displays its estimated size and recompression status.

Name	Estimated Size		
Main Menu	0.5 MB		
Options/Chapters	0.5 MB		
Extras	0.5 MB		
1stplay	4.1 MB		
SongVideo	58.1 MB		
Band Photos	34.4 MB		
Music Compilatio...	19.5 MB		

- If the audio/video components of a media asset can be burned to disc without recompression, a green check mark is displayed.
- If recompression is necessary, a yellow warning sign is displayed.
- If some files are compliant and some require recompression, a green warning sign is displayed.
- If you have specified to force recompression of a compliant video stream, a red warning sign is displayed.

 If a media file's format does not match the project format, the media file will be re-encoded during the preparation process. For example, if your media file is 4:3 MPEG-2 and your project is 16:9, the file will be re-encoded.

 To determine the best file format for your use, see "[Rendering files for your project](#)" on page 98.

How to determine whether menus and titles are compliant

Menus

Menus always use the settings displayed above the Project Properties button. All menus use the same audio format, aspect ratio (16:9 or 4:3), and frame size, but you can mix frame rates for menus within a single project.

A menu's video will not be recompressed if it meets the following requirements:

- Any background video must match the Video format setting.
- No graphics can be added to the menu.
- Buttons must use highlighting only. Using button thumbnails or text will require recompression.

A menu's audio will not be recompressed if its background audio matches the Audio format setting.

If a menu requires recompression, it will be recompressed using the Video format, Audio format, and the Frame rate setting from the Recompress settings section of the Optimize Disc dialog.

Media files

Media files will not be recompressed if rendered in a compliant format. For more information about preparing media files for a DVD Architect project, see "[Rendering files for your project](#)" on page 98.

If a media file requires recompression, it will be recompressed using the Video format and Audio format settings. You can select a media file in the Optimize Disc dialog and use the controls in the Recompress settings section to override the default project formats.

Music/video compilations

A music/video compilation's video will not be recompressed if it meets the following requirements:

- Any background video or images must match the Video format setting.
- No graphics can be added to the compilation.

The audio will not be compressed if it matches the Audio format setting.

If a music/video compilation requires recompression, it will be recompressed using the Video format and Audio format settings. You can select a music/video compilation in the Optimize Disc dialog and use the controls in the Recompress settings section to override the default project formats.

Picture compilations

The video portion of a picture compilation is always recompressed using the Video format setting, but you can select a picture compilation in the Optimize Disc dialog and use the controls in the Recompress settings section to override the default video format.

The audio will not be recompressed if it is rendered in any compliant audio format. If the audio requires recompression, it will be recompressed using the Audio format setting. You can select a picture compilation in the Optimize Disc dialog and use the controls in the Recompress settings section to override the default audio format.

Using the Optimize Disc dialog to fine-tune your project

1. From the File menu, choose Optimize Disc. The Optimize Disc dialog is displayed.
Each menu and title in your project is displayed on the left side of the dialog.

2. Adjust video settings as desired:

- a. Select a menu or title from the list.
- b. Click the Video 1 button on the right side of the dialog to show the settings for the selected item. Information about the video format of the selected item is displayed.

If a title has multiple video tracks, a separate Video button is displayed for each track.

If the video is already compliant, you need to select the Recompress control, click the button, and choose Yes from the menu to edit its recompression settings.

- c. Click the expand button  next to the Recompress settings heading to expand the controls if they are not already expanded.

Item	Description
Use default bit rate	Select the control, click the down arrow button , and choose Yes from the menu if you want to use the setting from the Default video bit rate for the video. Choose No from the menu and set a new bit rate in the Bit rate (Mbps) control if you want to use a specific bit rate for the recompressed file.
Bit rate (Mbps)	To change the bit rate for the selected item, select the box and type a new setting or select the box and click the down arrow button  to display a slider you can use to adjust the setting. This control is available only when No is selected in the Use default bit rate control
Aspect ratio	Select the control, click the down arrow button , and choose an aspect ratio from the menu if you want to choose a new video format for the recompressed video. If you choose From project, the setting from the Project Properties dialog is used. The settings are displayed above the Project Properties button. If you choose a widescreen video format, your video will be displayed in 16:9 on a widescreen television and will be letterboxed on a normal television.  This control is not available when a menu is selected. All menus in a project must have the same aspect ratio and resolution. Use the Video format drop-down list to control the aspect ratio and resolution of your project's menus.
Resolution	Select the control, click the down arrow button , and choose a setting from the menu to change the frame size of the recompressed video.  This control is not available when a menu is selected. All menus in a project must have the same aspect ratio and resolution. Use the Video format drop-down list to control the aspect ratio and resolution of your project's menus.
Frame rate	Select the control, click the down arrow button , and choose a setting from the menu to change the frame rate of the recompressed video.

Item	Description
Progressive	Select the control, click the down arrow button , and choose a setting from the menu to indicate whether you want to render the title or menu as progressive-scan video (applicable to DVD projects only). ◦ Choose Yes to recompress a menu or title as progressive-scan video. ◦ Choose No to recompress a menu or title as interlaced video. ◦ Choose Auto to allow the software to determine the appropriate format: if the source media is progressive-scan video, the video or title will be recompressed as progressive; if the source media is interlaced, the video or title will be recompressed as interlaced. When you choose Auto for a music/video compilation, each compilation item is recompressed as a separate title and will match the format of the source media. If the audio is longer than the video, the compilation item will be recompressed as progressive-scan video to prevent artifacts when the last frame is held.  Notes: ◦ If you use a background video in your menu, we recommend rendering the video in progressive-scan format before adding it to your project. Leave the Progressive setting at Auto, and the noncompliant menu will be rendered as progressive-scan video. Progressive-scan menus will provide the sharpest-looking text and highest level of player compatibility. If you need to use interlaced video as a menu background, choose No from the menu. When you choose No, the noncompliant menu will be rendered as interlaced video. ◦ When creating Blu-ray Disc projects, menus must match the field order set by your project's video format.

3. Adjust audio settings as desired:

- a. Select a menu or title from the list.
- b. Click the Audio 1 button on the right side of the dialog. Information about the audio format of the selected item is displayed.

If a title has multiple audio tracks, a separate Audio button is displayed for each track.

If the audio is already compliant, you need to select the Recompress control, click the button, and choose Yes from the menu to edit its recompression settings.

- c. Click the expand button  next to the Recompress settings heading to expand the controls if they are not already expanded.
- d. Select the Format control and click the down arrow button  to display a menu. Choose a setting from the menu to determine the file type and settings (bit rate or bit depth and sample rate) that will be used to recompress the selected file. For more information about audio settings, see "[Setting project properties](#)" on page 106.

4. The area at the bottom of the dialog shows information about your project. The Video format and Audio format settings from the Project Properties dialog are displayed, and your project size is estimated based on these formats and the Bit rate setting.

- a. Drag the Bit rate slider or type a value in the edit box to adjust the size of your project:
 - 9.8 Mbps is the maximum bit rate for DVD players.
 - 28 Mbps is the maximum bit rate for Blu-ray Disc projects burned to DVD media.
 - 48 Mbps is the maximum bit rate for Blu-ray Disc projects burned to Blu-ray Disc media.
 - Increasing the bit rate can improve quality, but you can fit less media on the disc.
 - Decreasing the bit rate can allow you to fit more video on the disc, but quality will be decreased.
- b. To change the video or audio format of your project, click the Project Properties button and make adjustments on the Disc Properties tab.
- c. If you want to automatically adjust the project video bit rate, click the Fit to Disc button to fit a project that is greater than the Target media size setting on the Disc Properties tab.

Only video that requires recompression will be adjusted. When your project cannot be made to fit on a disc, you can change the video settings so all titles and menus will be recompressed, or you can remove video from your project.

Saving your project

To save changes to the current project, choose Save from the File menu. Your project is saved with its existing name and is updated with the latest changes.

The first time you save a project, the Save As dialog is displayed. For more information, see "[Save As](#)" on page 126.

Save As

From the Save As dialog, you can save the current project to a different location or with a new name.

1. From the File menu, choose Save As. The Save As dialog is displayed.
2. Choose a drive and folder from the Save in drop-down list, or use the browse window to locate the folder where you want to save your project.
3. Type a name in the File name box, or select a file in the browse window to replace an existing project.
4. Choose a setting from the Copy media drop-down list if you want to copy your project's assets to the same folder as your project file:
 - None saves a standard DVD Architect project without copying media.
 - Copy user media with project creates copies of your media files in the project folder.
 - Copy user and theme media with project creates copies of your media files and any required theme files in the project folder.
5. Click the Save button.

Editing source projects

When your DVD Architect project uses media that was rendered with an embedded project path reference, you can easily open the source project in the associated application if you need to edit the media. By saving your project path reference when you render files in ACID 5.0, ACID Music Studio 6.0, Sound Forge Pro 8.0, Vegas Pro 6.0, or Vegas Movie Studio 6.0 or later, you can quickly access the media from DVD Architect via the Edit Source Project shortcut menu.

For example, imagine that you have an audio file in a DVD Architect menu that was rendered from an ACID project. In previewing your DVD Architect project, you discover that you'd accidentally rendered your ACID Pro project with a critical track muted. You could simply right-click media file in the Explorer window and choose Edit Source Project from the shortcut menu to reopen your ACID Pro project, unmute the track, and then rerender it.



The project information in the rendered file is a reference to a project file only. If you modify the source project file after rendering, the project data will no longer match the rendered file. To edit a project using a path reference, the project file and all media must be available on your computer.

1. Right-click a media file in the Explorer window.
2. From the shortcut menu, choose Edit Source Project. An ACID Pro, Vegas Pro, or Sound Forge Pro window will open with the source project.



To edit a source project using a computer other than the computer where the project was created, the editing computer must meet the following requirements:

- The software that was used to create the project must be installed and the project file extension (.acd, .acd-zip, .veg, .vf, or .frg) must be registered on the editing computer.
 - The editing computer must have the same version (or later) of the software as the computer where the project was created.
 - The project file must exist on the editing computer using the same file path as on the computer where the project was created.
 - The project's source media must exist on the editing computer. If the media files do not use the same file path as on the computer where the project was created, you will be prompted to choose a new folder or replacement files.
3. Edit the project as necessary.
 4. Render the edited project using the same name as the original media file and close the editing application.

Your project will automatically be updated to use the latest rendered media file.

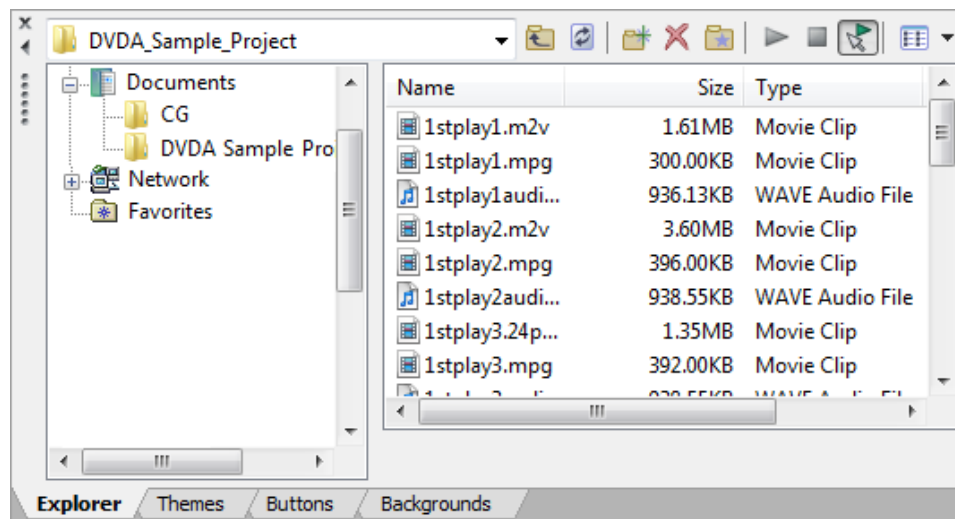
Finding and adding media

Once you've created a DVD Architect project, you'll need to decide which media you want to add to the disc.

 DVD Architect software supports many file types and can convert your media to the formats required for DVD or Blu-ray Disc as needed. However, for best performance (decreased disc preparation time and recompression), use existing rendered files. For more information about the types of files that can be used without recompression, see "[Rendering files for your project](#)" on page 98.

Choosing your media files

DVD Architect software supports a wide variety of media files. You can use the Explorer window to find and add media files to your project.



For more information, see "[Finding and adding media](#)" on page 128.

 DVD Architect software includes support for many file types and can convert your media to the formats required for output as needed. However, for best performance (decreased disc preparation time and recompression), use existing rendered files. For more information about the types of files that can be used without recompression, see "[Rendering files for your project](#)" on page 98.

Downloading media from the web

You can also download media files from the web for use in your project.

1. From the File menu, choose Get Media from the Web. Your web browser starts and attempts to connect to the Internet.
2. Search for and download files to use in your project.

Adding media from the Explorer window

1. Use the left portion of the Explorer window to browse your computer or network.
2. Select a file.
 - If the Auto Preview button  is selected, you can click a file in the Explorer window to start playing the file automatically in the workspace. Click the Stop Preview button  to stop the preview, or turn off the preview feature by deselecting the Auto Preview button.
 - When the Auto Preview button is not selected, click the Start Preview button  to preview a file in the workspace.



To browse the selected file's current location on your drive or network, right-click the file and choose Explore Current Folder to open the Windows Explorer.

3. Add a file to your project by doing one of the following:
 - Double-clicking a file to add it to the current menu.
 - Dragging a file from the Explorer window (or Windows Explorer) to the DVD Architect workspace.
 - Dragging a file from the Explorer window (or Windows Explorer) to a menu in the Project Overview window.
 - Dragging a file from the Explorer window (or Windows Explorer) to the root folder in the Project Overview window. Dragging a file to the root folder adds the media to your project without creating a button on a menu.

You can use this unassociated media as a transition between menus via end actions or as a destination for button actions or the Menu button on the remote control.



Select the Automatically link similar audio and video files check box on the General tab of the Preferences dialog if you want the software to look for and link audio files with the same base name when you add a video-only file to your project.

For example, if you had a video-only MPEG file (MyProject.mpg) and an audio file (MyProject.wav) in the same folder, the software will automatically use MyProject.wav as the audio track when you add MyProject.mpg to a menu.

For more information, see "[General Preferences](#)" on page 276.

4. After you've added your media, you can use the top portion of the DVD Architect workspace to lay out your project. For more information, see:

- ["Menu-based projects"](#) on page 148
- ["Music/video compilations"](#) on page 186
- ["Picture compilations"](#) on page 192
- ["Single-movie discs and titles"](#) on page 202

Resolving offline media

An offline media file is a file that is no longer available to DVD Architect. Media may be classified as offline if you eject removable storage after adding a file to your project or change a file's name or location.

DVD Architect will notify you if media in your project is offline. You can choose to search for the missing media, specify a replacement file, or ignore missing media and leave it offline.

If you search for missing media or specify a replacement file, your project will be updated to use the new file.

Adding data files to a disc

If you want to burn content to your disc, you can use the Project Properties dialog to choose the folder that contains the files you want to include.



You can add any type of files or subfolders to the Extras folder, but this content will only be available when browsing the disc on a computer.



The Extras folder is not available for Blu-ray Disc projects.

1. Collect your multimedia files in a folder on your computer. If you want to place the content in a subfolder at the root of the disc, create a subfolder within your specified extras folder:
 - For example, if you specify `c:\media\My_DVD_Project\` as your extras folder in step 4 below, all files and folders within `c:\media\My_DVD_Project` will be written to the root of the disc.
 - For example, if you specify `c:\media\My_DVD_Project\` as your extras folder in step 4 below, placing the files (and folders) you want to burn in a `c:\media\My_DVD_Project\Extras\` subfolder on your computer would cause the Extras folder and its contents to be written to the root of the disc.
2. From the DVD Architect File menu, choose Properties. The Project Properties dialog is displayed.
3. Select the Properties tab, and click the Disc Properties button at the top of the tab.
4. Select the Extras folder box, and then click the Browse button . The Browse for Folder dialog is displayed.
5. Select the folder where your multimedia files are saved, and then click OK.

Adding audio, video, and subtitles

You can add multiple audio, video, and subtitle tracks using DVD Architect™ Pro software. This will allow you to add support for multiple languages and multiple viewing angles.

Adding audio tracks

You can add multiple audio tracks to videos and picture compilations to add support for multiple languages, audio description, running commentaries, and so on.

When your disc is played, the DVD or Blu-ray Disc player will attempt to determine the appropriate default audio track. If the player cannot determine the correct language, the first track is used. If multiple tracks match the player's language setting – if you have an English dialogue track and an English commentary track, for example – the first track that matches the player's language is used. The viewer can choose which track is played during playback.

You can add up to eight audio tracks for each title.

Adding an audio track

1. Double-click a title in the Project Overview window (or double-click a button on a menu in the workspace) to open it.
2. If the Timeline window isn't already visible, choose Timeline from the View menu to display the Timeline window.
3. In the Timeline window, click the Insert Track button  and choose Insert Audio Track.

A blank audio track is added to the timeline. You can add an audio file by dragging it to the track or using the Media Properties controls in the Properties window. For more information, see "[Track Media](#)" on page 68.

4. Click the down arrow next to the Track Language button  and choose a language from the drop-down list to identify the track.
5. Repeat steps 3 and 4 as necessary to create the audio tracks for your project.

When setting up your project, we recommend using the same track sequence for all videos, picture compilations, and music/video compilations. If necessary, insert blank audio tracks to maintain the track sequence so that the disc will continue to play the same track number when you transition between titles. Be aware, however, that a user could manually choose a blank audio track without realizing that it was intentionally left blank.



Various brands and models of DVD players behave differently when encountering a blank audio track.

For example, assume following track order for the first two titles on your disc:

Title One

Track	Language
1	English
2	French
3	Italian
4	Spanish

Title Two

Track	Language
1	English
2	French
3	Spanish

Because the track sequence does not match, audio track playback will be inconsistent when you navigate between titles. For example, if you're playing Italian dialogue in the first title, audio track 3 continues playing when you skip to the second title, so you'd hear Spanish dialogue in the second title.

Using the same track sequence for all titles will ensure consistency across your project. If title two does not include Italian dialogue, you can add an empty track to maintain consistency:

Title One

Track	Language
1	English
2	French
3	Italian
4	Spanish

Title Two

Track	Language
1	English
2	French
3	[Empty]
4	Spanish

In this scenario, if you're playing Italian dialogue in the first title, no audio will be played when you switch to title two, which does not include Italian dialogue. If you're playing Spanish dialogue in title one, you'll continue to hear Spanish dialogue when you navigate to title two.

Replacing the audio in a track

You can replace the audio in a track by dragging a new file from the Explorer window or Windows Explorer or by using the Track Media page in the Media Properties pane of the Properties window. For more information, see "[Track Media](#)" on page 68.

Choosing which audio track is played when you play from the timeline

Select the Activate Track button  in an audio track header in the Timeline window to determine which track is played when you click the Play from In Point  or Play  button in the Timeline window.

Changing track colors

To change a track's color, right-click the header and choose Track Display Color from the shortcut menu. Choose a color from the submenu to change the icon in the track list and the audio waveform in the timeline.

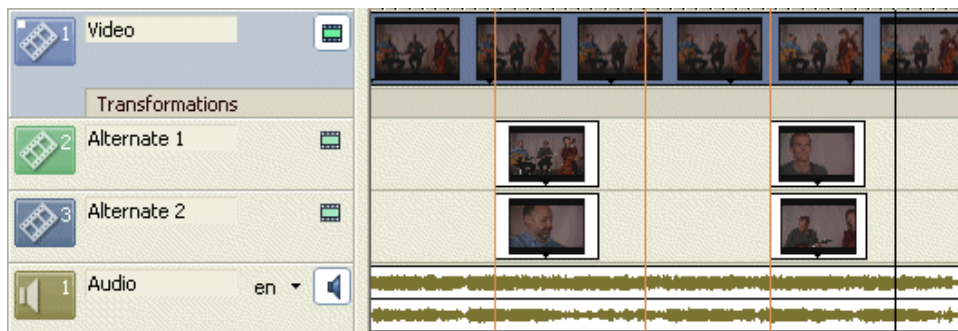
Track color settings are saved with your project.

Adding video tracks

You can add multiple video tracks to videos to add support for multiple viewing angles. During playback, the user can press the Angle button on the remote control to change angles. You can add up to eight video tracks for each title.

In the following example, the title's main video is on the Video track. When the user presses the Angle button on the remote control, playback switches to the Alternate 1 track. Pressing Angle again switches playback to the Alternate 2 track.

When an alternate video track is playing, video from the main video track is played whenever a video event does not exist on the alternate track.





The maximum overall bit rate for titles with multiple video angles is lower than the maximum for single-angle titles. The maximum bit rates in each type of project (DVD or Blu-ray Disc) for the number of video angles in an asset is listed below.

DVD project

Number of angles	Maximum bit rate (Mbps)
1	9.8
2-6	8
7-9	7.5

Blu-ray Disc project

Number of angles	Maximum bit rate (Mbps)
1	48
2	30
3-4	24
5-6	20
7-8	18
9	16



Any title that contains multiple video tracks will be recompressed when you prepare your project so the main video and the alternate angles can be combined into a new video file. To avoid recompression artifacts (and unnecessary processing time), use AVI files for your multiangle video titles.

Adding a video track

1. Double-click a title in the Project Overview window (or double-click a button on a menu in the workspace) to open it.
2. If the Timeline window isn't already visible, choose Timeline from the View menu to display the Timeline window.
3. In the Timeline window, click the Insert Track button  and choose Insert Video Track. A blank video track is added to the timeline.

You can add a video file by dragging it to the track or using the Media Properties controls in the Properties window. For more information, see "[Track Media](#)" on page 68. Unlike a standard video track, additional video tracks can contain multiple events from different media files, and you can trim the ends of the events.

Adding video events to a track

Unlike a standard video track, additional video tracks can contain multiple events from different

media files, and you can trim the ends of the events.

- The video on alternate video tracks does not need to match the length of the main video, which saves space on your prepared/burned disc.
- You can place events anywhere on the timeline: alternate-angle events do not need to be aligned in the timeline. The software will align the events automatically during project preparation by extending the event boundaries or combining events as needed.

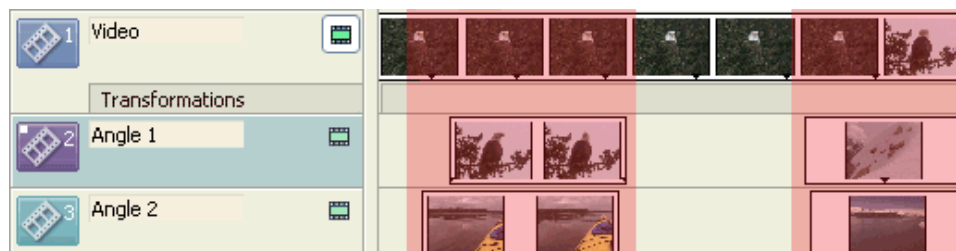
You can check the amount of time used by each angle by clicking the appropriate Angle button on the Optimize Disc dialog and checking the value of the Duration box. For more information, see "[Optimizing your project](#)" on page 119.

- Any title that contains multiple video tracks will be recompressed when you prepare your disc so the main video and the alternate angles can be combined into a new MPEG-2 file. To avoid recompression artifacts (and unnecessary processing time), use AVI files for your multiangle video titles.

In the sample timeline below, the alternate video angle events on tracks 2 and three are created from four separate media files.

Each event is shorter than the main video track so that only the video represented by the event will need to be prepared, though your alternate-angle events could match the length of the main video track if you wanted to be able to switch angles at any point during the title.

The events will be extended during project preparation so you can change angles at any point during the shaded areas.



1. Select the track where you want to add an event.
2. Perform either of the following actions to add a video event to the track:
 - In the Timeline window, click the Insert Video Event button  and browse to the media file you want to use.
 - Drag a video from the Explorer window to a track in the Timeline window. A video event is created where you drop the file.

If the Auto Ripple button  is selected, video events to the right of the cursor are shifted downstream to accommodate the new event.

If the Auto Ripple button is not selected, a new event is created at the cursor position, and the positions of all existing events are preserved.

3. Drag either end of an event to trim its length as needed.

Trimming alternate-video events conserves space on your disc and reduces disc-preparation time.

4. Drag the event to position it on the timeline. When you drag an event, events that occur later in the same track move automatically.

Editing video event properties

You can use the Event Media page in the Media and Event Properties pane to change the media used to play the selected alternate video event and adjust media settings. For more information, see "[Media Properties](#)" on page 67.

Choosing which video track is played when you play from the timeline

Select the Activate Track button  in a track header in the Timeline window to determine which track is played when you click the Play from In Point  or Play  button in the Timeline window.

Changing track colors

To change a track's color, right-click the header and choose Track Display Color from the shortcut menu. Choose a color from the submenu to change the icon in the track list and the audio waveform in the timeline.

Track color settings are saved with your project.

Adding subtitles

Subtitles display on-screen text during videos, picture compilations, and music/video compilations. Subtitles are intended to be used as various text translations of audio dialogue. By adding multiple subtitle tracks, you can support multiple languages.

When your disc is played, the DVD or Blu-ray Disc player will attempt to determine the appropriate default subtitle track. If the player cannot determine the correct language, the first track is used. If multiple tracks match the player's language setting—if you have an English dialogue track and an English commentary track, for example—the first track that matches the player's language is used. The viewer can choose which subtitle track is displayed during playback.

Each set of subtitles is added as a separate track in the timeline. You can add up to 32 subtitle tracks for each title (16 tracks for widescreen assets).

You can use DVD Architect software to design and create your subtitle text or import subtitles from a text file or third-party subtitling application.

Adding a subtitle track

1. Double-click a title in the Project Overview window (or double-click a button on a menu in the workspace) to open it.

2. If the Timeline window isn't already visible, choose Timeline from the View menu to display the Timeline window.
3. Click the Insert Track button  and choose Insert Subtitle Track from the menu. An empty subtitle track is added to the timeline above the video track.
4. Click the down arrow next to the Track Language button  and choose a language from the drop-down list to identify the track.
5. Repeat steps 3 and 4 as necessary to create the subtitle tracks for your project.

When setting up your project, we recommend using the same track sequence for all videos, picture compilations, and music/video compilations. If necessary, insert blank subtitle tracks to maintain the track sequence so that the disc will continue to play the same track number when you transition between titles. Be aware, however, that a user could manually choose a blank subtitle track without realizing that it was intentionally left blank.



Various brands and models of DVD players behave differently when encountering a blank subtitle track.

For example, assume following track order for the first two titles on your disc:

Title One

Track	Language
1	English
2	French
3	Italian
4	Spanish

Title Two

Track	Language
1	English
2	French
3	Spanish

Because the track sequence does not match, subtitle playback will be inconsistent when you navigate between titles. For example, if you're viewing Italian subtitles in the first title, subtitle track 3 continues playing when you skip to the second title, so you'd see Spanish subtitles in the second title.

Using the same track sequence for all titles will ensure consistency across your project. If title two does not include Italian subtitles, you can add an empty subtitle track to maintain consistency:

Title One

Track	Language
1	English
2	French
3	Italian
4	Spanish

Title Two

Track	Language
1	English
2	French
3	[Empty]
4	Spanish

In this scenario, if you're watching Italian subtitles in the first title, no subtitles will be displayed when you switch to title two, which does not include Italian subtitles. If you're watching Spanish subtitles in title one, you'll continue to see Spanish subtitles when you navigate to title two.

Adding text

1. Double-click a title in the Project Overview window (or double-click a button on a menu in the workspace) to open it.
2. If the Timeline window isn't already visible, choose Timeline from the View menu to display the Timeline window.
3. Click to position the cursor in the timeline where you want to add the subtitle text.
4. Create a subtitle event by performing either of the following actions:
5. Select the Activate Track button  on the track where you want to add subtitles and then choose Subtitle Text from the Insert menu. An event is added to the track, and the text box in the workspace is made editable so you can change the text. If a subtitle event exists at the cursor position, another text box is added to the workspace within the current subtitle event.
6. Click the Insert Subtitle Text Event button  to add a subtitle event at the cursor position in all selected tracks. The text box in the workspace is not made editable, but you can edit the text later.

If the Auto Ripple button  is selected, subtitle events to the right of the cursor are shifted downstream to accommodate the new event.

If the Auto Ripple button is not selected, a new event is created at the cursor position, and the positions of all existing events are preserved.

7. Repeat steps 3 and 4 to create subtitle text as needed through the project.

Creating a graphic subtitle

To create a graphic subtitle, open your image editing software and create a new project. Your subtitle graphic should match the frame size in DVD Architect. For example, if the frame resolution is 4:3 NTSC (720 pixels x 480 pixels) in DVD Architect, the subtitle graphic must be 720 pixels x 480 pixels.



If you use a graphic that does not match the frame size, adjust its position after importing it. For more information on editing graphics properties, see "[Graphics Properties](#)" on page 42.

Now you can choose the type of highlight mapping for your project:

Highlight mapping	Background color	Text color
Transparency	Transparent	Black

Graphics can have one layer (transparency with text) or two layers (a transparent background layer and text layer).

Intensity	Black	White
-----------	-------	-------

This option gives the text a more polished, smooth look.



Anti-alias colors are mapped to the four colors in the color set.

Color channel	Black	Red, blue, or green
---------------	-------	---------------------

This option allows you to use different colors simultaneously. To change the text color, see the text immediately following this table.

To change the text color when using the color channel option:

1. In the Graphics Properties pane, select Color Sets.
2. Click the expand button  next to any of the listed color sets.
3. Choose the color you want to edit. For more information about editing a color set, see "[Using color sets](#)" on page 161.

Color Set Mode	Corresponding Color
1: fill color	Red
2: anti-alias color	Green
3: outline/background color	Blue
4: transparent color	Transparent

Inserting a graphic subtitle

1. Double-click a title in the Project Overview window (or double-click a button on a menu in the

workspace) to open it.

2. If the Timeline window isn't already visible, choose Timeline from the View menu to display the Timeline window.
3. Click the Insert Track button  in the Timeline window and choose Insert Subtitle Track from the menu. An empty subtitle track is added to the timeline above the video track.
4. Click to position the cursor in the timeline where you want to add a subtitle text event.
5. From the Insert menu, choose Graphic to open the Insert Graphic dialog.
6. In the Insert Graphic dialog, browse to the .psd file (or other graphics file) and click Open to insert the subtitle graphic into the workspace.
7. Right-click the graphic in the workspace and choose Make Graphic Actual Size from the shortcut menu.
8. Click the Media button in the Graphics Properties pane and choose a setting from the Highlight mapping menu to indicate how to use the colors in the graphic. For more information about creating a graphic subtitle, see ["Creating a graphic subtitle"](#) on page 140.
9. Select the subtitle event in the Timeline window and use the Subtitle Event page in the Media and Subtitle Properties pane to choose the color set for the event. For more information, see ["Subtitle Event"](#) on page 66.

Importing subtitles

1. Double-click a title in the Project Overview window (or double-click a button on a menu in the workspace) to open it.
2. If the Timeline window isn't already visible, choose Timeline from the View menu to display the Timeline window.
3. Click the Insert Track button  in the Timeline window and choose Insert Subtitle Track from the menu. An empty subtitle track is added to the timeline above the video track.
4. Click the Import Subtitles button  in the Timeline window. The Import Subtitles dialog is displayed to allow you to browse to a .sub or .txt file.

When you click Open, the contents of the selected subtitle file are added to the track.

Each line in the file creates a subtitle event, and the events are spaced equally through the duration of the video.

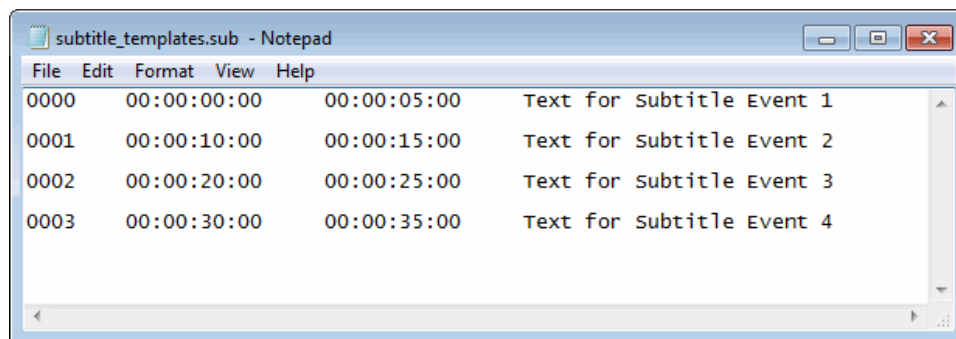
For example, the following text file would create three subtitle events:

```
No, 'tis not so deep as a well, nor so wide as a  
church-door; but 'tis enough, 'twill serve: ask for  
me to-morrow, and you shall find me a grave man.
```

5. You can then adjust the timing of the events to correspond with the spoken words in the audio track.

Creating a subtitle (.sub) file with timecode-based subtitle events

1. Open a new document in a text editor.
2. Create an entry for each subtitle event containing a subtitle number, timecode in position, timecode out position, and subtitle text:
 - a. Type a number to identify the subtitle event, and then press Tab.
 - b. Type the timecode position where you want the event to appear on screen and then press Tab.
 - c. Type the timecode position where you want the event to disappear from the screen and then press Tab.
 - d. Type the subtitle text you want to display on screen, and then press Enter.
3. Repeat step 2 for each subtitle event. When you're finished, you'll have a file that looks something like the following sample:



4. Save the text document with a .sub file extension.
5. You can now import the subtitles from your .sub file. For more information, please see the *Import subtitles* heading in this help topic.

Exporting subtitles

1. Double-click a title in the Project Overview window (or double-click a button on a menu in the workspace) to open it.
2. If the Timeline window isn't already visible, choose Timeline from the View menu to display the Timeline window.
3. Select a subtitle track in the Timeline window.
4. Click the Export Subtitles button  in the Timeline window. The Export Subtitles dialog is displayed to allow you to specify a file name and location for your file.

Creating subtitles from regions in a Vegas Pro project

If you've used Vegas Pro software to create the video for your DVD Architect project, you can use regions in the Vegas Pro project to create subtitles. The length of the region determines the subtitle event length, and the region text is used as subtitle text.

1. Save the regions in your Vegas Pro project to a text file.
 - a. Open your project in Vegas Pro software.
 - b. Create regions in the project where the name of the region is the subtitle text you want to display.
 - c. Verify that no regions are overlapping.
 - d. From the Tools menu, choose Scripting, and then choose Run Script from the submenu. The Run Script dialog is displayed.
 - e. Run the Export Regions As Subtitles.js script to save your regions list as a text file.
2. Switch to the DVD Architect window.
3. Double-click a title in the Project Overview window (or double-click a button on a menu in the workspace) to open it.
4. If the Timeline window isn't already visible, choose Timeline from the View menu to display the Timeline window.
5. Click the Insert Track button  in the Timeline window and choose Insert Subtitle Track from the menu. An empty subtitle track is added to the timeline above the video track.
6. Click the Import Subtitles button  in the Timeline window. The Import Subtitles dialog is displayed.
7. In the Import Subtitles dialog, browse to the file you saved in step 1.

When you click Open, the contents of the selected subtitle file are added to the track.

Adjusting subtitle event timing

A subtitle event's position on the timeline determines when it is displayed in your project, and its duration determines how long it is displayed on screen.

Editing a single event's position

1. Double-click a title in the Project Overview window (or double-click a button on a menu in the workspace) to open it.
2. If the Timeline window isn't already visible, choose Timeline from the View menu to display the Timeline window.

3. Drag an event in the timeline to change its position.

If the Auto Ripple button  is selected, subtitle events to the right of the event you drag will move with the event you drag.

If the Auto Ripple button is not selected, only the event you drag will move; the positions of all existing events are preserved.

 Notes:

- Events will snap to the cursor and to other event edges. If you want to trim an event to a specific time, position the cursor at that point on the timeline and drag your event edge to the cursor. If you want two subtitle events to be adjacent on the timeline, turn off Auto Ripple and drag an event edge until snaps to the other event's edge. You can turn snapping on or off by choosing Enable Snapping from the Options menu.
- Events are forced to frame boundaries when the Quantize to Frames button  is selected in the Timeline window.

Editing a series of events

1. Select the first subtitle event you want to edit.
2. Position the cursor and click the Play button  to start playback in the timeline.
3. During playback, use the following shortcut keys to adjust your subtitle events:

Shortcut Key	Description
[	Sets the start of the subtitle event at the cursor position.
]	Sets the end of the subtitle event at the cursor position and selects the next subtitle event.
	Hold Shift while pressing] to set the end of the subtitle event without selecting the next event.
\	Sets the end of the current subtitle event and the start of the next subtitle event at the cursor position.
T	Creates a subtitle event at the cursor position.
	Press T again before the cursor passes the end of the event to set the end of the event and create a new event.

4. Repeat step 3 to set the position of each subsequent subtitle event.

Adjusting subtitle event length

A subtitle event's length on the timeline determines how long it is displayed on screen.

 Subtitle events cannot exceed 12 minutes when playing your project with a DVD player. If an event exceeds 12 minutes, the subtitle will be displayed on screen only for the first 12 minutes.

1. Double-click a title in the Project Overview window (or double-click a button on a menu in the workspace) to open it.
2. If the Timeline window isn't already visible, choose Timeline from the View menu to display the Timeline window.
3. Hover over the edge of an event. Your cursor is displayed as a .
4. Drag the edge of the event to change the event's length.

If the Auto Ripple button  is selected, subtitle events to the right of the event you drag will move with the event you drag.

If the Auto Ripple button is not selected, only the event you drag will move; the positions of all existing events are preserved.

 Notes:

- Events will snap to the cursor and to other event edges. If you want to trim an event to a specific time, position the cursor at that point on the timeline and drag your event edge to the cursor. If you want two subtitle events to be adjacent on the timeline, turn off Auto Ripple and drag an event edge until snaps to the other event's edge. You can turn snapping on or off by choosing Enable Snapping from the Options menu.
- Events are forced to frame boundaries when the Quantize to Frames button  is selected in the Timeline window.

Copying formatting and position from one event to others

1. Double-click a title in the Project Overview window (or double-click a button on a menu in the workspace) to open it.
2. If the Timeline window isn't already visible, choose Timeline from the View menu to display the Timeline window.
3. Select a subtitle event and edit it. If you want to select multiple events use hold Ctrl or Shift while clicking events. The event you want to edit should be the last event you click.
 - Use the Transformations page in the Properties window or drag a text object in the workspace to change its position.
 - Use the text bar to change the subtitle's font, size, or justification. For more information, see "[Adding and editing text](#)" on page 154.
 - Use the Subtitle Event page in the Properties window to change the color set used to display subtitle text. For more information, see "[Subtitle Event](#)" on page 66.
4. Right-click the event you edited and choose a command from the shortcut menu to indicate where you want to apply the formatting:
 - Choose Apply Formatting to Selected Events to apply the formatting and position of the text object you click to other selected subtitle events.

- Choose Apply Formatting to Selected Tracks to apply the formatting and position of the text object you click to events on other selected subtitle tracks.

 If subtitle events have multiple text boxes, formatting will be applied to the appropriate text boxes if possible based on object order. For example, if the event you edit has three text boxes with object order 1, 2, and 3, editing the text box with object order 2 will modify only text boxes with object order 2 on the selected events or active track. For more information, see "[Editing object order](#)" on page 183.

Setting a subtitle to display automatically

You can set an object to automatically display subtitles during disc playback, regardless of the user's settings.

 This section assumes you have already created subtitles for an object. For information on adding subtitle tracks and text, please see the previous sections in this help topic.

1. In the workspace, select the object for which you have created subtitles.
2. In the Button Properties pane, click the Action button.
3. Select the Set subtitle track control, click the down arrow button , and choose 1.
4. Double-click the object in the workspace to open it.
5. In the Media Properties pane, click the Remote Buttons button.
6. Select the Subtitle track change control, click the down arrow button , and choose Off.

Editing a subtitle event's color set

You can use the Subtitle Event page in the Properties window to adjust which color set is used to draw a title's subtitle text.

The Subtitle Event page is displayed in the Properties window when you select a subtitle event in the Timeline window.

You can adjust color sets independently for each subtitle track.

For more information, see "[Subtitle Event](#)" on page 66.

Choosing which subtitle track is played when you play from the timeline

Select the Activate Track button  in a subtitle track header in the Timeline window to determine which track is played when you click the Play from In Point  or Play  button in the Timeline window.

Changing track colors

To change a track's color, right-click the header and choose Track Display Color from the shortcut menu. Choose a color from the submenu to change the icon in the track list and the subtitle events in

the timeline.

Track color settings are saved with your project.

Menu-based projects

When you start a menu-based project in DVD Architect™ Pro software, a main menu is created by default. You can add more menus to allow the user to play movies and navigate to other menus by selecting buttons.

Think of menus as an outline of your project: each menu can contain background media, graphics, text, and links to music/video compilations, picture compilations, or movies.

Pages extend menus across multiple screens; add a page when you want to add more items to a menu than will fit on a single page.



If you use a background video in your menu, we recommend rendering the video in progressive-scan format before adding it to your project. On the Video tab of the Optimize Disc dialog, click the Progressive box and choose Auto to render the noncompliant menu as progressive-scan video. Progressive-scan menus will provide the sharpest-looking text and highest level of player compatibility.

If you need to use interlaced video as a menu background, click the Progressive box and choose No. When you choose No, the noncompliant menu will be rendered as interlaced video.

For more information, see "[Optimizing your project](#)" on page 119.



Some players will not display the last frame of a menu correctly when using interlaced background video.

Adding a submenu

From the Insert menu, choose Submenu to add a page to the currently selected menu.

You can use submenus to organize your content, and users will use the navigation controls on their DVD or Blu-ray Disc remote controls to access your menus.

1. Choose the menu from which you want to link to the new menu:
 - Select a menu in the Project Overview window.
 - Click the down arrow in the address bar to select a menu.
 - Click the Back to Parent , Previous Page , and Next Page  buttons at the top of the workspace to navigate your menus.
2. From the Insert menu, choose Submenu. A button is added to the current menu as a link to the new menu, and a new, blank menu is added to your project.

You can now edit the page add titles (movies, music, or compilations), playlists, or scripts to it. For more information, see "[Menu Page Properties](#)" on page 55 and "[Adding titles or playlists to a menu](#)" on page 150.

Adding a submenu from a file

From the Insert menu, choose Submenu from File to create a new menu using a .psd file that contains background, button, and mask images in a single layered file.

For information about creating menus as .psd files, see "[Creating Custom Menus and Buttons Using Layered PSD Graphics](#)" on page 250.

1. Choose the menu from which you want to link to the new menu:
 - Select a menu in the Project Overview window.
 - Click the down arrow in the address bar to select a menu.
 - Click the Back to Parent , Previous Page , and Next Page  buttons in the workspace to navigate your menus.
2. From the Insert menu, choose Submenu from File. The Open dialog is displayed.
3. Select the .psd file you want to use to create the menu, and then click the Open button. A button is added to the current menu as a link to the new menu, and the menu is added to your project.
4. Double-click the new menu in the Project Overview window to open it in the workspace.
5. Add links for each button:
 - a. Select a button in the workspace.
 - b. Select the Action button at the top of the Button Properties window.
 - c. Select the Command box, click the down arrow button , and choose Link from the menu.
 - d. Select the Destination box, click the down arrow button , and choose the button's destination from the menu.
 -  If you're linking to a title, the title must be in your project before you can choose it as a destination. Drag the media file from the Explorer window to the Project Overview window to add it to your project.
 - e. Repeat steps a through d for each button in your menu.
6. You can now edit the buttons and menu page as needed. For more information, see "[Button Properties](#)" on page 44 and "[Menu Page Properties](#)" on page 55.
 -  If you want to restore the menu to match the appearance of the saved .psd file, choose Reapply Layout from File from the Edit menu. Button sizes and positions will be updated to match the .psd file. Buttons that were deleted after importing the .psd will be restored, and buttons that were added after importing the .psd will be removed. Nonvisual settings – such as button links – will be preserved.

Adding, deleting, and rearranging pages

Pages allow you to extend a menu to fit more buttons than will fit on a single screen.

Adding a page to a menu

1. Double-click a menu in the Project Overview window (or navigate in the workspace) to open the menu you want to edit.
2. From the Insert menu, choose Page. An arrow button is added to the current menu as a link to the new page, and a new, blank menu is added to your project.
3. You can now edit the page and add titles (movies, music, or compilations) or playlists to it. For more information, see "[Menu Page Properties](#)" on page 55 and "[Adding titles or playlists to a menu](#)" on page 150.

Deleting a page

1. Double-click a menu in the Project Overview window (or navigate in the workspace) to open the menu you want to edit.
2. From the Edit menu, choose Delete Page to remove the page from your project.

Changing page order

From the Edit menu, choose Page Order, and then choose Move Forward or Move Back to move the currently selected page forward or back in your project.

Adding titles or playlists to a menu

Each menu can contain links to other menus, videos, music/video compilations, and picture compilations. Each menu in a DVD full-screen project can contain up to 36 buttons, and menus in a DVD widescreen project can have a maximum of 18 buttons. Menus in a Blu-ray Disc project can have a maximum of 250 buttons.

1. Choose a command from the Insert menu:
 - Choose Media to add a media file to your project. You can add a video or any other supported media file.
 - Choose Picture Compilation to create a picture compilation.
 - Choose Music/Video Compilation to create a music/video compilation.
 - Choose Playlist to add a playlist to your project. You can use playlists to play a sequence of movies, chapter markers, music/video compilations, or picture compilations.
 - Choose DVD Script to add a script to your project. You can use scripts to add interactivity or more complexity to your DVDs.



Scripting is not available for Blu-ray Disc projects.



If you want to create multiple links to a single title, drag it from the Project Overview window to your menu page to create a link. You can then use the Button Properties controls to choose the destination chapter, audio track, and subtitle track that the link will play. Multiple titles that use the same video, audio, and subtitle tracks will only be saved once on the disc. For more information, see "[Button Properties](#)" on page 44.

2. A button is added to the current menu (or page) as a link to the new title.

You can use the Buttons window to change the appearance of the button, or you can use the Button Properties controls in the Properties window to edit the button's action, appearance, highlighting, and navigation settings. For more information, see "[The Buttons window](#)" on page 21 and "[Button Properties](#)" on page 44.



If you delete a picture compilation, music/video compilation, or video, the object link and the target title will be removed from your project.

Editing title order

From the File menu, choose Order Titles to display the Order Titles dialog, where you can change the order in which titles are arranged on the disc.

Reordering titles can be useful when fine-tuning the layer break on dual-layer discs or to ensure that the titles in a playlist will play back sequentially when a user interrupts playback by pressing the Next button on the remote control.

1. From the File menu, choose Order Titles. The Order Titles dialog is displayed.
By default, the title order matches the order in which you added titles to the project.
2. Select a title and click the Move Up or Move Down buttons to change the selected title's order.
3. Repeat step 2 as needed.
4. Click OK to close the Order Titles dialog and save your changes.

Adding graphics to a menu or compilation

Adding a graphic to a menu differs slightly from adding other objects. Graphics are added as design elements only and cannot be used for navigation.

You can add graphics on menus, music/video compilations, or picture compilations.

You can use still images or video files as graphics. If you use a video file, you can choose to display a static frame, or you can animate the graphic by playing the video.

Adding a graphic to a menu or compilation

1. Double-click a menu or compilation in the Project Overview window (or navigate in the workspace) to open the menu or compilation you want to edit.
2. From the Insert menu, choose Graphic. The Insert Graphic dialog is displayed.

3. Select the file you want to add and click Open.



Shortcuts:

- Right-click an image or video file and drag it to a menu or compilation in the workspace. When you drop the file, a shortcut menu is displayed. Choose Insert Graphic from the shortcut menu.
- Right-click the a menu or compilation in the workspace, choose Insert Graphic from the shortcut menu, and browse to the file you want to add.

Resizing a graphic

Perform either of the following actions to resize a graphic:

- Drag a graphic in the workspace with the selection  or sizing  tool.
- Select a graphic with the selection , sizing , or navigation  tool, click the Transformations button in the Graphics Properties pane, and use the X position and Y position boxes to set the object's center point. The X and Y coordinates are based on the frame size of your project. For example, if you're creating an NTSC (720x480) project, (0,0) is the top-left corner of the frame, and (720,480) is the lower-right corner. For more information, see ["Graphics Properties"](#) on page 42.

For more information about arranging and moving objects, see ["Arranging and moving menu objects"](#) on page 173.

Moving a graphic

Perform any of the following actions to resize a graphic:

- Right-click a graphic in the workspace and choose Make Graphic Actual Size from the shortcut menu.
- Select a graphic with the selection  or sizing  tool, click the Transformations button in the Graphics Properties pane, and use the X size and Y size boxes to specify a new height and width. For more information, see ["Graphics Properties"](#) on page 42.
- Select a graphic with the selection  or sizing  tool, click the Transformations button in the Graphics Properties pane, and use the X size and Y size boxes to specify a new height and width.



If you do not want an image to be stretched when you change the height or width, select the Maintain aspect ratio box on the Transformations page of the Graphics Properties pane, click the down arrow button , and choose Yes from the drop-down list.

Changing a graphic file

Perform either of the following actions to change a graphic:

- Drag a file from the Explorer window to an existing graphic.
- Select a graphic with the selection , sizing , or navigation  tool, click the Media button in the Graphics Properties window, and use the Object media box to browse to a new file (you can also drag a file to the box). For more information, see "[Graphics Properties](#)" on page 42.

Adjusting a graphic's appearance

You can use the controls in the Crop and Adjust window to adjust a graphic's brightness and contrast, colorize the image, or adjust its transparency. You can also add keyframes to change the appearance over time, creating an animated effect.

1. Right-click a graphic in the workspace and choose Crop and Adjust from the shortcut menu.
2. Use the Brightness, Contrast, Contrast Center, Colorize, and Alpha controls in the Crop and Adjust Properties pane to adjust the appearance of the graphic.

For more information about using these controls, see "[The Crop and Adjust window](#)" on page 165.

Cropping a graphic

You can use the controls in the Crop and Adjust window to crop a graphic.



To adjust a graphic's crop settings over time, add keyframes using the Keyframe Controller at the bottom of the Crop and Adjust window. For more information, see "[Crop and video effects keyframes](#)" on page 204.

1. Right-click a graphic in the workspace and choose Crop and Adjust from the shortcut menu.
2. Click the  button next to the Crop box to expand the controls.
3. Use the Crop controls to add a crop the edges of the graphic to frame the image:
 - a. Select the Left box, click the down arrow button , and drag the slider (or type a value in the box) to trim the left edge of the image.
 - b. Drag the Top slider (or type a value in the box) to trim the top edge of the image.
 - c. Drag the Right slider (or type a value in the box) to trim the right edge of the image.
 - d. Drag the Bottom slider (or type a value in the box) to trim the bottom edge of the image.

For more information, see "[The Crop and Adjust window](#)" on page 165.

Animating a graphic or choose the video frame for a graphic

When you use a video file as a graphic, you can choose whether you want to display an animated graphic or a single frame from the video as a static image.

1. If the window isn't already visible, choose Properties from the View menu.
2. Select a graphic with the selection , sizing , or navigation  tool.

3. Select the Media button at the top of the Graphics Properties pane.
4. Click the expand button  next to the Object Media box to expand the controls.
5. Select the Style box, click the down arrow button , and choose a command from the menu to indicate whether you want to display a still image or animated graphic.
6. Select the Start time box, click the down arrow button , and drag the slider (or type a value in the box) to a command from the menu to indicate which frame is displayed (for a still image) or the frame at which playback will begin (for an animated graphic).

Changing a graphic's size or position over time

You can use transformation keyframes in the Timeline window to animate a graphic by changing its size or position over time. For more information, see "[Transformation keyframes](#)" on page 206.

Adding and editing text

From the Insert menu, choose Text to add a text box to the current menu or page. You can use the text bar to adjust text.



 From the View menu, choose Text Bar to display or hide the text bar.

Adding text to a menu or page

1. From the Insert menu, choose Text. A text box is added to the current menu or page.
2. Type your text in the box.
3. Drag the text box to set its position.

Setting a menu's title text object

Right-click a text object and choose Title Object from the shortcut menu to use the selected text as the menu's title object. A title object is used when you apply themes to a menu.

The title object will also be used as the menu's title in the Project Overview window if the menu has not been renamed. After renaming a menu in the Project Overview window, changing the title object will set the object that will be used for themes, but it will not rename the menu.

Editing text

1. Select a text box in the current menu.
2. From the Edit menu, choose Edit Text (or press F2). The text becomes editable.

3. Type in the text box to edit the contents of the text box.

Formatting text

1. Select a text box with the selection , sizing , or navigation  tool. The text bar below the workspace displays the text settings.

From the View menu, choose Text Bar to display or hide the text bar.

2. Choose a font and size from the drop-down lists to set the typeface that will be used to display your text.
3. Click the B, I, and S buttons to toggle bold, italic, and shadow effects on your text.

When editing subtitle text, the S button is unavailable. You can select the O button to display an outline around your subtitle text. The outline is drawn using color 3 (outline/background color) from the subtitle's selected color set. For more information, see "[Subtitle Properties](#)" on page 65.

4. To apply a shadow, click the down arrow next to the S button. A pop-up window is displayed to allow you to set the position, color, and blurring of the shadow text.
5. Adjust alignment:

Item		Description
Justify left		Text is aligned to the left edge of the text box.
Justify center		Text is aligned to the horizontal center of the text box.
Justify right		Text is aligned to the right edge of the text box.
Justify top		Text is aligned to the top edge of the text box. When you add text to the box, the width of the box remains fixed, the top edge of the text box is anchored, and lines are added to the bottom of the box.
Justify vertical center		Text is aligned to the vertical center of the text box. When you add text to the box, the width of the box remains fixed, the center of the text box is anchored, and lines are added to the top and bottom of the box.
Justify bottom		Text is aligned to the bottom edge of the text box. When you add text to the box, the width of the box remains fixed, the bottom edge of the text box is anchored, and lines are added to the top of the box.

6. Click the down arrow next to the color swatch to open the color picker, where you can set the red, green, blue, and alpha channels for your text.

Moving text

1. Select a text box with the selection  or sizing  tool.
2. Move the selected text:

- Drag the text box.
- Click the Transformations button in the Properties window to display the controls.

You can type values in the X position and Y position boxes to set the object's center point.

The X and Y coordinates are based on the frame size of your project. For example, if you're creating an NTSC project with a frame size of 720x480, (0,0) is the top-left corner of the frame, and (720,480) is the lower-right corner.

Animating text on menus and compilations

You can use transformation keyframes in the Timeline window to animate text on menus or compilations by changing the size or position of the text box over time. For more information, see "[Transformation keyframes](#)" on page 206.

Setting looping points for menus

When a menu's end action is set to loop, you can specify a loop point to indicate the point where looped playback will begin. Menu buttons are not displayed until playback reaches the loop point.

1. If the window isn't already visible, choose Properties from the View menu.
2. Double-click a menu in the Project Overview window (or navigate in the workspace) to open the menu you want to edit.
3. Set the menu's end action:
 - a. Click the End Action button at the top of the Properties window.
 - b. Select the Command box, click the down arrow button , and choose Loop from the drop-down list.

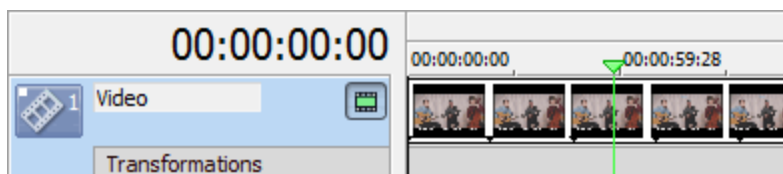


If the menu's end action is not set to Loop, you can still set a menu loop point to set the point at which buttons are displayed.

4. Set your menu's length:
 - a. Click the General button at the top of the Properties window.
 - b. Select the Menu length box, click the down arrow button , and choose a command from the drop-down list:
 - Auto calculate - The software will determine the menu length based on the background audio, video, and button animations.
 - Specify - When is selected, you can type a number in the Length box or click the down arrow button  to display a slider to change set to match the length of the background video if one exists.
-  If you type a value in the Length box that is longer than the background video, the background video will end, and any animated thumbnails will continue to play until the end of the menu. If you want the menu to loop smoothly when your menu duration is longer than the video, create a new background video that matches the desired menu length.
5. Perform either of the following procedures to set the point at which buttons will be displayed and looped playback will begin:
 - On the General section of the Menu Page Properties window, select the Loop Point box, click the down arrow button , and drag the slider (or type a value in the box) to set the loop point.
 - Click in the Timeline window to position the cursor at the desired loop point, and then click the Set Loop Point button .

For example, if you set the Menu length to 00:00:30.000 and set the Loop point to 00:00:20.000, the first 20 seconds of the background media are played, and then menu buttons are displayed and playback repeats from 00:00:20.000 to 00:00:30.000.

The loop point is represented by a green marker in the Timeline window:



For more information about editing menu page properties, see "[Menu Page Properties](#)" on page 55.

Adding a scene selection menu

A scene selection menu displays a link for each scene/chapter marker in a video, making it easy to find just the scene you want to see.

Creating a menu that continues playback after playing the selected scene (automatic scene selection menus)

1. Add a video title to a menu and add your scene/chapter markers. These markers are added in the Timeline window and are used to create your scene selection menu.
2. Select the button in the workspace or select the title in the Project Overview window.
3. Choose Scene Selection Menu from the Insert menu. The Insert Scene Selection Menu dialog is displayed.
4. In the Page title box, type the title you'd like to be displayed on the new menu.
5. In the Links per page box, specify the number of links you'd like to have displayed on each page. For example, if your video includes fifteen scene/chapter markers, typing 5 in this box will create a scene-selection menu with three pages.
6. Click the OK button to create the menu and pages. You can then edit the menu as necessary.



If you want to create individual thumbnails that link to chapter points without creating a scene-selection menu, add an empty button to your menu and use its button action to link to a title and chapter. For more information, see "[Button Properties](#)" on page 44.

Creating a menu that returns to the scene selection menu after playing the selected scene/chapter (manual scene selection menus)

1. Add a title to the menu you want to use as a scene selection menu.
2. Select the title's button in the workspace or select the title in the Project Overview window.
3. From the Edit menu, choose Copy. The button is copied to the clipboard.
4. From the Edit menu, choose Paste. A copy of the button is added to your menu.



Even though you're creating multiple copies of your title, the title will be saved to the disc only once. Multiple titles that use the same video, audio, and subtitle tracks will only be saved once on the disc. For more information, see "[Optimizing your project](#)" on page 119.

5. Repeat step 4 for each scene you want to be able to play from the menu.
6. Set the in and out points for each button:
 - a. Double-click the button in the workspace or double-click the title in the Project Overview window to open it.
 - b. In the Timeline window, position the cursor where you want the button to begin playback and click the Set In Point button  or drag the in point  in the time ruler.
 - c. Position the cursor where you want the button to stop playback and click the Set Out Point button  or drag the out point  in the time ruler.
7. Repeat step 6 for each button.

Creating a scene selection only disc

This procedure assumes your title includes scene/chapter markers. You can add markers in the

Timeline window. For more information, see "[The Timeline window](#)" on page 24.

1. From the File menu, choose New.
2. Select the Single Movie icon , and then click OK. The Open Media dialog is displayed.
3. Select the video file you want to use, and then click OK.
4. In the Project Overview window, right-click the video and choose Insert Scene Selection Menu from the shortcut menu. The Insert Scene Selection Menu dialog is displayed.
5. In the Page title box, type the title you'd like to be displayed on the new menu.
6. In the Links per page box, specify the number of links you'd like to have displayed on each page. For example, if your video includes fifteen scene/chapter markers, typing 5 in this box will create a scene-selection menu with three pages.
7. Click the OK button to create the menu and pages. You can then edit the menu as necessary.
8. In the Project Overview window, select the menu page (i.e. Scene Selection (Page 1)) and click the Set Disc Start button .

Adding a setup menu

You can use button actions to create a setup menu that allows the user to choose which audio and subtitle tracks will be used when your disc is played.



If a button action or end action changes the audio or subtitle track after it is selected on your setup menu, the new track will be used when you navigate between titles unless another button action, end action, or user action (via the remote control) changes the track.

When setting up your project, we recommend using the same track sequence for all videos, picture compilations, and music/video compilations. If necessary, insert empty audio or subtitle tracks to maintain the track sequence so that the disc will continue to play the same track number when you transition playback between titles. For more information about adding audio tracks, see "[Adding audio tracks](#)" on page 132. For more information about adding subtitle tracks, see "[Adding subtitles](#)" on page 137.

1. Add a menu to your project.
2. Add a button for each audio track in your project:
 - a. From the Insert menu, choose Empty Button.
 - b. Press F2 and edit the button's text to describe the audio track it will select.
 - c. In the Button Properties pane, use the Destination drop-down list on the Action page to determine what happens when the button is clicked:
 - Choose your setup menu from the Destination drop-down list if you want the button to select an audio track without navigating away from the setup menu.

- Choose a media file or menu from the Destination drop-down list if you want to navigate away from the setup menu after choosing an audio track. For example, choosing a media file would allow you to automatically start playback of a title using the selected audio. Choosing a menu could navigate to a scene selection menu or a separate setup menu for choosing the subtitle track.
 - d. In the Button Properties pane, choose a track from the Set audio track drop-down list on the Action page to determine which audio track the button will select.
 - e. Repeat steps a through d for each audio track in your project.
- 3. Add a button for each subtitle track in your project:
 - a. From the Insert menu, choose Empty Button.
 - b. Press F2 and edit the button's text to describe the subtitle track it will select.
 - c. In the Button Properties pane, use the Destination drop-down list on the Action page to determine what happens when the button is clicked:
 - Choose your setup menu from the Destination drop-down list if you want the button to select a subtitle track without navigating away from the setup menu.
 - Choose a media file or menu from the Destination drop-down list if you want to navigate away from the setup menu after choosing a subtitle track. For example, choosing a media file would allow you to automatically start playback of a title using the selected subtitles. Choosing a menu could navigate to a scene selection menu or a separate setup menu for choosing the audio track.
 - d. In the Button Properties pane, choose a track from the Set subtitle track drop-down list on the Action page to determine which subtitle track the button will select.
 - e. Repeat steps a through d for each subtitle track in your project.
- 4. If you want the current tracks to be used throughout the disc, change the button properties for all links to your media so No change is selected for the Set audio track and Set subtitle track controls.

Adding navigation buttons

As you create menus and pages, navigation buttons are automatically created for you. For example, if the main menu is selected when you add a submenu, a button link to the new menu is added to the main menu, and a button link to the main menu is added to the new menu.

If you delete the default navigation buttons, you can create by choosing a command from the Insert menu:

Command		Description
Back Button		Allows navigation to the main menu.
Next Button		Allows navigation to the next page.
Previous Button		Allows navigation to the previous page.

Command		Description
Empty Button		Adds a button without a link. Use the Button Properties controls to edit it. For more information, see " Button Properties " on page 44.

 The commands are available only if the target menu or page exists.

You can use the Buttons window to change the appearance of the button, or you can use the Button Properties controls in the Properties window to edit the button's action, appearance, highlighting, and navigation settings. For more information, see "[The Buttons window](#)" on page 21 "[Button Properties](#)" on page 44.

Creating menu transitions

You can combine button actions and media end actions to play a media file as a transition between menus and between menus or titles.

1. Drag the transition media file from the Explorer (or Windows Explorer) to the root folder in the Project Overview window. Dragging a file to the root folder adds the media to your project without creating a button on a menu.
2. Set the transition media's end action to link to the menu or title that you want to display after the transition. For more information, see "[Media Properties](#)" on page 67.
3. Double-click a menu in the Project Overview window (or navigate in the workspace) to open the menu you want to edit.
4. Select a button.
5. Set the button action to play the transition media. For more information, see "[Button Properties](#)" on page 44.

When a user activates the button, the button plays the transition media, and the transition media's end action displays the target menu or title.

6. Repeat steps 1 through 5 for each button on the menu.

You can create multiple copies of your transition media at the root of the Project Overview window and specify a different menu as an end action for each instance. The transition media will only be saved to the disc once.

 Multiple titles or media files that use the same video, audio, and subtitle track will only be saved once on the disc. For more information, see "[Optimizing your project](#)" on page 119.

Using color sets

Color sets provide the palette you use when designing your disc.

Each menu page or title in your DVD Architect project can have up to four color sets with four colors each. Each color set includes a fill color, outline/background color, anti-alias color, and transparent color. By choosing different color sets, you can display button highlighting using one color set to

indicate that the button is selected and a different color set to indicate that it has been activated, or you can assign distinct colors to subtitle events.

Editing a color set

1. Click the Color Sets button at the top of the Graphics Properties, Menu Page Properties, Button Properties, Media and Subtitle Properties, Media Properties, Picture Compilation Properties, or Music/Video Compilation Properties pane:
 - Use the Menu Page Properties window to edit the color sets that will be used to display selected, activated, and inactive buttons.
 - Use the Media Properties window to edit the color sets that will be used to draw subtitle events for a title.
2. Click the expand button  next to the color set you want to edit.
3. Choose a setting from the Color Set X drop-down list to indicate whether you want the color set to be available to your entire project (Project wide) or only the currently selected menu or title (Custom).

For example, if you're working on Menu A, set Color Set 2 to Custom and adjust the colors. The modified Color Set 2 is available only on Menu A. If you navigate to another menu or title, that menu or title will use the project-wide color sets or its own custom color sets.

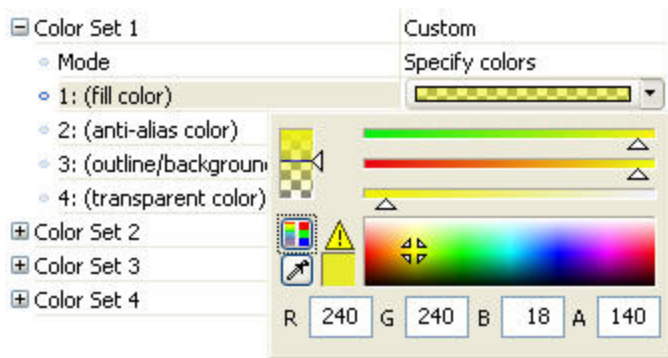
4. Select the Mode box, click the down arrow button , and choose a setting from the drop-down list to indicate you want to specify the colors in your color set:

Item	Description
Blend colors	You only need to choose the color set's fill color; the other colors will be determined automatically by the software.
Specify colors	You need to choose the fill color, anti-alias color, outline/background color, and transparent color.

5. Select the color you want to edit. For the best results, blend the colors evenly from the fill color to the transparent color.

Color	Used For
Fill color	Used to display subtitle text and highlighting on menu buttons.
Anti-alias color	Used to smooth the edges of menu button highlighting and subtitle text. The color should be a blend of the fill color and the outline/background color.
Outline/Background color	Used to display the outline or background color for menu buttons or subtitle text.
Transparent color	Used to determine the transparent portions of subtitle text and menu button highlighting. If you choose a color that is not transparent, the screen will be tinted.

- Click the down arrow button  next to the selected color swatch to display a color picker, where you can edit the selected color. Click the Change Color Space button  to switch between RGB and HSL color modes.



 When you're using the color picker, a warning  is displayed when you choose an out-of-gamut color. Click the color swatch below the warning to correct the color.

Applying a color set

You can apply color sets to buttons using the Selected button colors, Active button colors, and Inactive button colors drop-down lists on the General page of the Menu Page Properties pane. For more information, see "[Menu Page Properties](#)" on page 55.

 In Blu-ray Disc projects, color sets are not supported for inactive buttons. None (all transparent) must be chosen from the Inactive button colors drop-down list.

To apply color sets to subtitles, select the events you want to change and use the Colors drop-down list in the Subtitle Properties pane. For more information, see "[Subtitle Properties](#)" on page 65.

Chapter 10

Editing menu objects

An *object* is any button, graphic, or text box on a menu. DVD Architect™ Pro software automatically adds objects to the current page when you add submenus, pages, and media.

Resizing objects

Resizing an object allows you to change the size of a button or text box.



Tips:

- Set Maintain aspect ratio to Yes on the Transformations page of the Properties window if you do not want an image to be stretched when you change the height or width.
- Choose Auto from the Font Size drop-down list if you want text to automatically adjust its size to fit the text box.

Resizing an object

Select an object with the sizing tool  and adjust the drag handles, or type values in the X size and Y size boxes on the Transformations page of the Properties window to set the size of the object.



Tips:

- Hold Ctrl while dragging the edge of an object to resize it from the center.
- Hold Shift while dragging the edge of an object to resize it proportionally.
- Hold Ctrl+Shift while dragging the edge of an object to resize it proportionally from the center.

Making all selected objects the same height or width

1. Select the objects you want to adjust. Hold Ctrl or Shift to select multiple objects.
2. While holding the Ctrl or Shift key, select the object whose size you want to copy.
3. Click the Make Same Width  or Make Same Height  button. All selected objects are adjusted to match the object that has focus (the last object you selected).

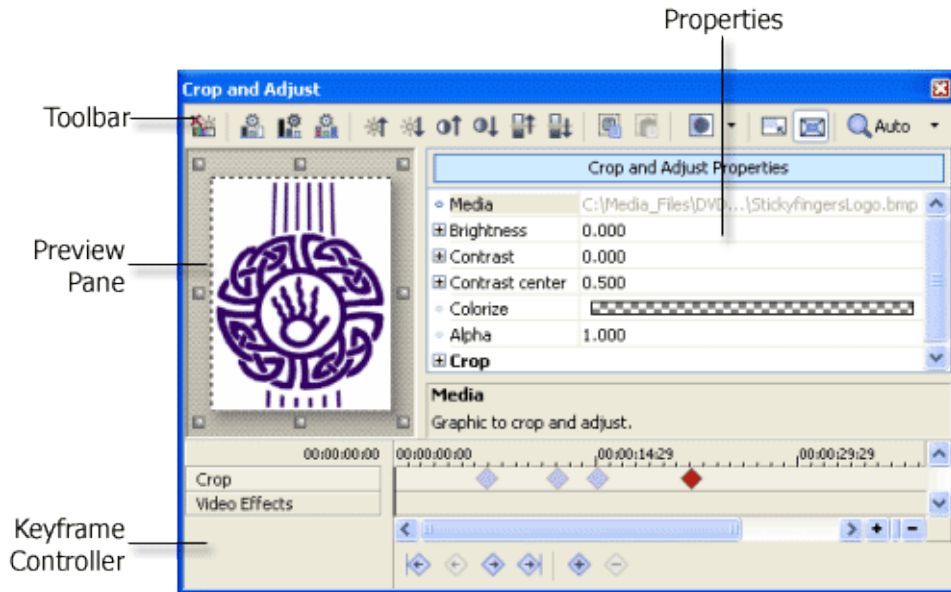


If you resize an object in one direction only, the object will not resize if Maintain aspect ratio is set to Yes on the Transformations page of the Properties window because the image cannot be resized in one direction and still maintain its aspect ratio. You can turn off the Maintain aspect ratio setting or resize the object in both directions.

The Crop and Adjust window

From the View menu, choose Crop and Adjust to display or hide the Crop and Adjust window. You can also right-click a graphic in the workspace and choose Crop and Adjust from the shortcut menu (or select the Video box in the Properties window, click the down arrow button , and then choose Crop and Adjust from the menu).

Use the Crop and Adjust window to crop a video or graphic or adjust its appearance. You can set these changes to occur over time through the use of keyframes in the Keyframe Controller at the bottom of the window. The window includes a preview pane so you can monitor your progress and compare the processed and unprocessed image.



Using the toolbar

You can use the buttons on the toolbar to make quick adjustments to a video or image. You can use the preview pane in the Crop and Adjust window to preview your adjustments.

 Expand the Brightness, Contrast, and Contrast center controls on the right side of the dialog to see the results of your adjustments.

Item	Description	
 Reset Effect Properties	Click to remove all effects from the media.	
 Auto Levels	Click to automatically adjust the brightness and contrast based on contents of the selection box. The most abundant colors (either light or dark) are enhanced.	
	Auto levels is intended to be used on still images, but can also be used for video. When you use the effect on video, be aware that the setting will be determined by a single frame. Before opening the Crop and Adjust dialog, select a frame in the Timeline window to choose a frame that is representative of the video.	
 Auto Levels (Dark)	Click to automatically adjust the brightness and contrast based on the contents of the selection box. The least abundant colors (either light or dark) are enhanced.	
 Auto Level Channels	Click to automatically adjust brightness and contrast based on the contents of the selection box. Adjustment is performed independently on each color channel.	

Item	Description
 Increase Brightness	Click to increase or decrease the brightness of the image.
 Decrease Brightness	
 Increase Contrast	Click to increase or decrease the contrast of the image.
 Decrease Contrast	
 Increase Contrast Center	Click to adjust the anchor point around which contrast is adjusted.
 Decrease Contrast Center	
 Copy Crop Rectangle to Clipboard	Click to copy the current selection to the clipboard and paste the selection from the clipboard. You can use these buttons when you want to crop multiple images to the same dimensions.
 Paste Crop Rectangle from Clipboard	
 Bypass Effects on Regions	Creates a split-screen preview that bypasses all video effects without removing them from your media. Click the down arrow button  next to the Bypass Effects on Regions button  and choose a setting from the menu to choose which portion of the preview pane will display bypassed effects.
 Lock Aspect Ratio	Click if you want the selection box to retain its aspect ratio during resizing. When this button is not selected, the height and width can be resized independently.  Press Ctrl at any time to override these settings.
 Size About Center	Click if you want the selection box to retain its center point when you resize the box by dragging its edges. When the button is not selected, the opposite side of the selection box will remain anchored when you drag the edges to resize it.  Press Alt at any time to override these settings.
 Zoom settings	Click to choose the magnification of the image in the Crop and Adjust dialog. When Auto is selected, the image will zoom to fit the current window size.

Adjusting a graphic's appearance

You can use the Crop and Adjust Properties controls on the right side of the Crop and Adjust dialog to specify settings for adjusting an image's appearance or cropping.

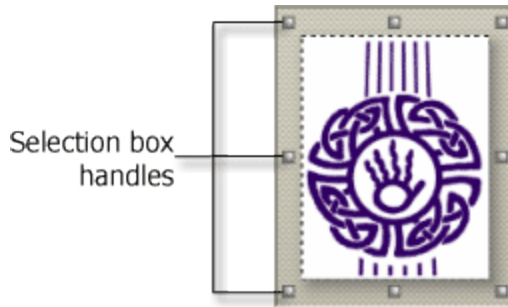
Item	Description
Media	Displays the location and file name of the currently selected media file.
Brightness	Use the Brightness controls to adjust the brightness of the image. ■ Select the Brightness box, click the down arrow button , and drag the slider (or type a value in the box) to adjust the overall brightness of the image. ■ Click the expand button  next to the Brightness box to display individual controls for the red, green, and blue channels in the image. Select the Red, Green, or Blue box, click the down arrow button , and drag the slider (or type a value in the box) to adjust the brightness of an individual color channel.
Contrast	Use the Contrast controls to adjust the contrast of the image: ■ Select the Contrast box, click the down arrow button , and drag the slider (or type a value in the box) to adjust the overall contrast of the image. ■ Click the expand button  next to the Contrast box to display individual controls for the red, green, and blue channels in the image. Select the Red, Green, or Blue box, click the down arrow button , and drag the slider (or type a value in the box) to adjust the contrast of an individual color channel.
Contrast center	Use the Contrast center controls to set the anchor point around which contrast is adjusted: ■ Select the Contrast center box, click the down arrow button , and drag the slider (or type a value in the box) to adjust the overall contrast of the image. ■ Click the expand button  next to the Contrast center box to display individual controls for the red, green, and blue channels in the image. Select the Red, Green, or Blue box, click the down arrow button , and drag the slider (or type a value in the box) to adjust the contrast center of an individual color channel.

Item	Description
Colorize	Use the Colorize controls to add a color tint to the image: 1. Select the Colorize box and click the down arrow button  to display a color picker. 2. Edit the selected color by performing any of the following actions: ■ Drag the R, G, and B sliders to choose a color, and drag the vertical alpha slider to set transparency. ■ Type values in the R, G, B, and A boxes. ■ Select the eyedropper tool to sample a color from your screen. ■ Click the Change color space button  to switch between RGB and HSL color modes.  When you're using the color picker, a warning icon  is displayed when you choose an out-of-gamut color. Click the color swatch below the warning to correct the color.
Alpha	Select the box, click the down arrow button , and drag the slider (or type a value in the box) to adjust the transparency of the image: drag left to increase transparency, or drag right to make the image more opaque.
Crop	Use the Crop controls to add a crop to the edges of the graphic to frame the image: ■ Select the Left box, click the down arrow button , and drag the slider (or type a value in the box) to trim the left edge of the image. ■ Drag the Top slider (or type a value in the box) to trim the top edge of the image. ■ Drag the Right slider (or type a value in the box) to trim the right edge of the image. ■ Drag the Bottom slider (or type a value in the box) to trim the bottom edge of the image.

Cropping a graphic

Perform either of the following procedures to crop a video or image:

Drag the handles on the selection box in the preview pane to adjust its size, or drag from the center of the box to change its position. The selection box represents the portion of the image that will be visible.



Tips:

- Click the Lock Aspect Ratio button  if you want the selection box to retain its aspect ratio during resizing.
- Right-click the selection box and choose Match Output Aspect to force the height:width ratio of the selection box to match the Video format setting in your Project Properties. For more information, see "[Setting project properties](#)" on page 106.

-or-

1. Click the expand button  next to the Crop box to expand the controls.
2. Use the Crop controls to add a crop to the edges of the graphic to frame the image:
 - a. Select the Left box, click the down arrow button , and drag the slider (or type a value in the box) to trim the left edge of the image.
 - b. Drag the Top slider (or type a value in the box) to trim the top edge of the image.
 - c. Drag the Right slider (or type a value in the box) to trim the right edge of the image.
 - d. Drag the Bottom slider (or type a value in the box) to trim the bottom edge of the image.

Adding keyframes

Use the Keyframe Controller at the bottom of the Crop and Adjust dialog to insert and edit crop or video effect keyframes. Keyframes allow you to animate your video or graphic by adjusting the settings over time. For more information on adding keyframes, see "[Crop and video effects keyframes](#)" on page 204.

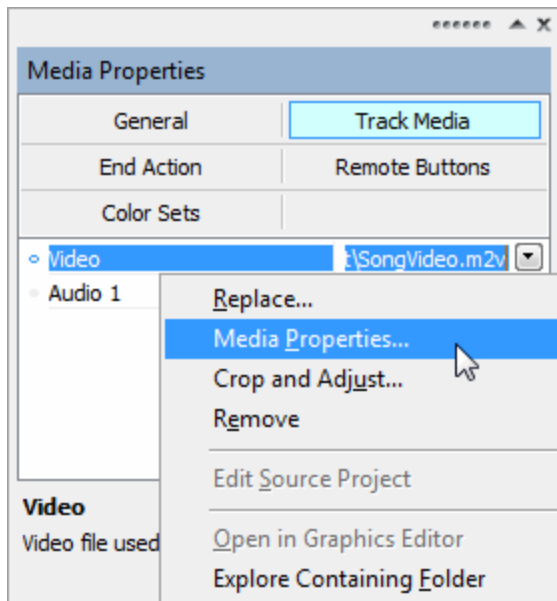
Viewing and editing media properties

You can use the Media Properties dialog to display information about the selected media file. The application will try to detect the properties of your media files automatically. In most cases, you will not need to edit file properties.



Editing media properties will affect all instances of the media file in your project.

To display the Media Properties dialog, select a media file in the workspace, select the path to the file in the Properties window, click the down arrow button , and then choose Media Properties from the menu:



General

Item	Description
File name	Displays the name of the selected media file.

Video Stream

Item	Description
Media attributes	Displays the frame size, color depth, and length of the media file.
Media format	Displays the file format used to store the media.
Frame rate	Displays the frame rate of the media file.
Field order	Choose a setting from the drop-down list to change the field order of the file. Consult your capture/video output card's manual for the proper field order. ■ None (progressive scan) - Select this option when viewing the video on a computer. This option ignores interlacing. ■ Upper field first - Select this option (also called <i>odd</i> or <i>field A</i>) for video that will be viewed on a television. ■ Lower field first - Select this option (also called <i>even</i> or <i>field B</i>) for DV output or if Upper field first produces jittery or shaky output or if your hardware manual specifies lower field first.

Item	Description
Pixel aspect ratio	Choose a setting from the drop-down list to change the pixel aspect of the file. This setting will depend on your capture/video output card. Consult your capture/video output card manual for the proper settings.
Alpha channel	Choose a setting from the drop-down list to change the alpha channel information for the file. If the alpha channel in an image is not detected, choose the correct type of alpha channel from this drop-down list. If you're unsure, try the Premultiplied setting first. ■ Undefined - Video provides no alpha channel information. This setting ignores any alpha channel information in the file. ■ None - Video has no alpha channel or there is an alpha channel but it's completely opaque (solid). ■ Straight (unmatted) - Transparency information is maintained in only the alpha channel. Alpha information must be applied to the RGB channels before compositing. ■ Premultiplied - The standard method of handling alpha information. Transparency information is maintained in the alpha and RGB channels, and the image is ready for compositing. No RGB component exceeds the alpha value. ■ Premultiplied (dirty) - Similar to Premultiplied, but RGB components may exceed the alpha. This setting is used mainly for images created by 3D applications involving compositing of 3D images over a non-solid color image background.
Background color	If you choose Premultiplied or Premultiplied (dirty) from the Alpha channel drop-down list, click the down arrow button  to display a color picker, where you can specify the background color of the stream.

Audio Stream

Item	Description
Media attributes	Displays the sample rate, bit depth, number of channels, and length of the media file.
Media format	Displays the file format used to store the media.

Open in Graphics Editor

If you need to edit a graphics file from your project, right-click a graphic in the workspace and choose Open in Graphics Editor from the shortcut menu (or select the Video box in the Properties window, click the down arrow button , and then choose Open in Graphics Editor from the menu) to start your graphic-editing application and modify the selected image.

After you have edited and saved the file, DVD Architect software automatically detects the updated file updates it in the project.



You can specify the location of your preferred graphics editor on the Video tab in the Preferences dialog. The Preferred graphics editor box displays the path to the application that will be used. Click the Browse button to choose a different application, or click Clear to remove the associated application (when the box is empty, DVD Architect software will use the application associated with the file type when you right-click a graphic and choose Open in graphics editor from the shortcut menu). For more information, see "[Video Preferences](#)" on page 278.

Arranging and moving menu objects

Everybody likes tidy menus, right? DVD Architect software provides several tools to allow you to move and arrange objects on a menu.

When Enable Snapping is turned on, you can choose to have objects snap to the workspace grid, other objects, or safe areas. For more information, see "[Enable Snapping](#)" on page 176.

Selecting objects

Click the selection tool  to select and move objects. When using the selection tool, objects and their associated text are grouped. You can move objects by dragging them on the workspace.

Click the sizing tool  to select, move, and resize objects. When using the sizing tool, you can select text boxes independently of their associated objects. You can move objects by dragging them or resize them by dragging the handles along their borders.

Click the navigation tool  to select objects and view and edit information about which menu button is selected when you use the Up, Down, Left, and Right buttons on your player remote control.

Changing an object's position

1. Select a button or text box with the selection  or sizing  tool.
2. Click the Transformations button in the Button Properties or Object Properties pane in the Properties window.
3. Drag an object in the workspace or type values in the X position and Y position boxes to set the object's center point.

The X and Y coordinates are based on the frame size of your project. For example, if you're creating an NTSC (720x480) project, (0,0) is the top-left corner of the frame, and (720,480) is the lower-right corner.

Tips:

- Hold Shift while dragging to defeat horizontal snapping.
- Hold Ctrl while dragging to defeat vertical snapping.
- Hold Alt while dragging to constrain to horizontal or vertical motion.

Aligning objects in a menu

1. Select the selection  or sizing  tool.
2. Select the objects you want to align. Hold Ctrl or Shift to select multiple objects.
3. While holding the Ctrl or Shift key, select the object to which you want to align the selected objects.
4. Click a button on the left edge of the workspace.

Item	Description
 Align Left	Aligns all selected objects to the left edge of the last-selected object.
 Align Horizontal Center	Aligns all selected objects to the horizontal center of the last-selected object.
 Align Right	Aligns all selected objects to the right edge of the last-selected object.
 Align Top	Aligns all selected objects to the top edge of the last-selected object.
 Align Vertical Center	Aligns all selected objects to the vertical center of the last-selected object.
 Align Bottom	Aligns all selected objects to the bottom edge of the last-selected object.

Automatically aligning objects

Theme-based menus

If you've applied a theme to a menu, you can choose to align menu objects automatically when you add media to the menu.

Select the Double-clicking files in the Explorer reapplies theme layout check box on the General tab of the Preferences dialog if you want to automatically realign objects according to the current theme when you double-click media files in the Explorer window. When you double-click a file, the new file is added, and the objects are realigned on the menu.

When the check box is cleared, the media files are added to the menu and existing object positions are preserved. For more information, see "[General Preferences](#)" on page 276.

From the Edit menu, choose Reapply Theme Layout to realign objects at any time.

Layered .psd menus

If you've created menus using layered .psd files, choose Reapply Layout from File from the Edit menu to restore the menu to match the appearance of the saved .psd file.

Button sizes and positions will be updated to match the .psd file. Buttons that were deleted after importing the .psd will be restored, and buttons that were added after importing the .psd will be removed. Nonvisual settings – such as button links – will be preserved.

Centering objects

1. Select the selection  or sizing  tool.
2. Select the objects you want to align. Hold Ctrl or Shift to select multiple objects.
3. Click a button on the left edge of the workspace:
 - The Horizontal Centering button  moves the selected objects to the horizontal center of the screen.
 - The Vertical Centering button  moves the selected objects to the vertical center of the screen.

Adjusting object spacing

1. Select three or more objects you want to align using the selection  or sizing  tool. Hold Ctrl or Shift to select multiple objects.
2. Click a button on the left edge of the workspace:
 - The Space Across button  adjusts the selected items so an equal amount of horizontal space exists between objects.
 - The Space Down button  adjusts the selected items so an equal amount of vertical space exists between objects.

Deleting objects

1. Select the objects you want to delete using the selection  or sizing  tool. Hold Ctrl or Shift to select multiple objects.
2. From the Edit menu, choose Delete. The objects are deleted from the menu and from your project.

Animating objects

You can use transformation keyframes in the Timeline window to animate objects on menus by changing the size or position of the object over time. For more information, see "[Transformation keyframes](#)" on page 206.

Enable Snapping

From the Options menu, choose Enable Snapping to turn snapping on or off.

Snapping helps you align items on a menu when you add or move objects.

 Hold the Shift key to temporarily override horizontal snapping, or hold the Ctrl key to override vertical snapping.

Turning snapping on or off

From the Options menu, choose Enable Snapping to turn snapping on or off. When snapping is enabled, objects can snap to the following points:

- The grid
- Other objects
- Safe areas

Choose a command from the Options menu to determine which snap points will be used.

Snapping to the grid

When snapping is enabled, you can choose to have objects snap to grid lines in the workspace (you can display and hide the grid by choosing Workspace Overlays from the View menu and then choosing Show Grid from the submenu).

From the View menu, choose Snap to Grid (or press Ctrl+F8) to toggle snapping to grid lines.

 To change the color and spacing of the grid, choose Grid Settings from the Options menu.

Snapping to objects

When snapping is enabled, you can also choose to have objects snap to other object boundaries.

From the Options menu, choose Snap to Objects (or press Shift+F8) to toggle snapping to objects.

Snapping to safe areas

When snapping is enabled, you can also choose to snap to the safe area boundaries.

From the Options menu, choose Snap to Safe Areas (or press Ctrl+Shift+F8) to toggle snapping to safe areas.

From the View menu, choosing Workspace Overlays, and then choose Show Title Safe Area or Show Action Safe Area to display or hide safe areas. Safe areas are displayed as borders around your video to represent the visible areas for action and titles. The outer border marks the area that will be visible on a television screen, and the inner border is the suggested area for titles.

After verifying that your action and titles are within the safe areas, however, you should test your project on the destination television monitor.

Using automatic button actions

A button's action determines what happens when a user selects a button on your menu. You can use the Action page in the Button Properties pane to assign a button action.

Normally, a user needs to press the Enter button on the player remote control to trigger a button to perform its action. However, when you use automatic button actions, the button's action is performed when the button is selected.



Automatic button actions are especially useful for navigation buttons, such as previous/next page buttons in multipage menus. For example, without automatic button actions, you'd have to use the arrow buttons on your player remote to select the Next Page button and then press the Enter button to navigate to the page. If you use automatic button actions, the disc will automatically advance to the next page as soon as the Next Page button is selected. For more information, see "[Adding navigation buttons](#)" on page 160.

1. If the window isn't already visible, choose Properties from the View menu.
2. Double-click a menu in the Project Overview window (or navigate in the workspace) to open the menu you want to edit.
3. Select a button in the workspace with the selection , sizing , or navigation  tool.
4. Click the Action button at the top of the Button Properties pane.
5. Select the Auto-activate box, click the down arrow button , and choose Yes from the drop-down list.

When the user selects the button, the action specified by the Action page in the Button Properties pane is performed automatically.

Adding buttons to video

You can add buttons to a video title to make your discs more interactive. For example, add a button to a video title to take the viewer to a disc's outtakes or special features like those found on commercial discs.



Notes:

- A DVD project with a 16:9 aspect ratio can contain a maximum of 18 buttons on each title.
- A DVD project with a 4:3 aspect ratio can contain a maximum of 36 buttons on each title.
- A Blu-ray Disc project can contain a maximum of 250 buttons on each title.



You can also add buttons to picture and music/video compilations. For more information about adding a picture compilation to your project, see "[Picture compilations](#)" on page 192. For more information about adding a music/video compilation to your project, see "[Music/video compilations](#)" on page 186.

1. Double-click a video title in the Project Overview window (or navigate in the workspace) to open it.
2. In the Timeline window, click to position the cursor where you want to add the button to your project.
3. Add a button using any of the following methods:
 - From the Insert menu, choose Empty Button.
 - From the Timeline window, click Insert Button .
 - From the Buttons window, double-click a button to insert it into the workspace.
 - From the Buttons window, click a button and drag it into the workspace.
 - From the Buttons window toolbar, click Insert Button .
4. You can use the Button Properties controls in the Properties window to edit the button image and the button action. For more information, see "[Button Properties](#)" on page 44.
5. When you add a button to a video, a button region is created in the Timeline window. This button region indicates how long the button will be visible in your project.

You can insert buttons-on-video markers in the Timeline window so you can easily adjust the length of your button regions.

For more information about marker types and inserting markers, see "[Learning about marker types](#)" on page 25.



Deleting all buttons in a button region will eliminate the entire button region.

6. To add another button to a video, repeat steps 2-5 as needed. When you have multiple buttons in your video, you can edit the button order. For more information, see "[Editing button order](#)" on page 183.

Using buttons on video without recompressing a title

Normally, adding buttons to a DVD-compliant video will cause the title to be recompressed.

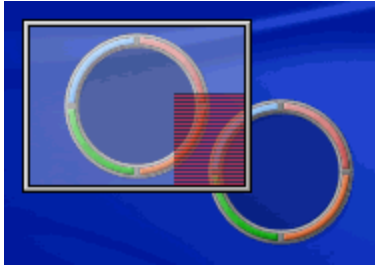
If you want to avoid recompressing the video, you can create a button without a thumbnail image or text. Without a thumbnail image or text, the button will not be visible during playback. However, when the button is selected, highlighting is applied, and the user can activate the button - it's a simple way to create a link to a hidden feature or other easter egg on your disc.

1. Double-click a title in the Project Overview window (or double-click a button on a menu in the workspace) to open it.
2. From the View menu, choose Timeline to display the Timeline window.
3. Click the Insert Button button  in the Timeline window to add a new, empty button to your video.

4. Use the Action page in the Button Properties pane to set the button action. For more information, see ["Action"](#) on page 45.
5. Use the Highlight page in the Button Properties pane to set the button's highlight style. For more information, see ["Highlight"](#) on page 51.

Finding and correcting overlapping buttons

When buttons on a menu overlap, you'll see a warning when you prepare your project. To find overlapping buttons, just select the buttons on your menu. Overlapping areas are shaded:



You can set the overlap color on the Display tab of the Preferences dialog. For more information, see ["Display Preferences"](#) on page 281.

Copying and pasting attributes

Copying and pasting attributes allows you to quickly apply settings from one item in your project to other items. You can choose to paste any or all of the following attributes:

- Button frame
- Media effects
- Text properties
- Size
- Size and position

1. Copy the items from which you want to copy attributes:
 - a. Double-click a menu in the Project Overview window (or navigate in the workspace) to open the menu that contains the object you want to copy.
 - b. Select a button in the workspace with the selection , sizing , or navigation  tool.
 - c. From the Edit menu, choose Copy.
2. Select the items to which you want to paste attributes:
 - a. Double-click a menu in the Project Overview window (or navigate in the workspace) to open the menu that contains the object you want to edit.

- b. Select a button, text box, or graphic in the workspace with the selection , sizing , or navigation  tool. Hold Ctrl or Shift while clicking to select multiple items.
- c. From the Edit menu, choose Paste Attributes, and then choose a command from the submenu:

Command	Description
Button frame	Replaces the button frame and associated mask with the settings from the button you copied in step 1. To view information about a button's frame, use the Media page in the Button Properties window. For more information, see "Button Properties" on page 44.
Media effects	Replaces media effects settings (brightness, contrast, contrast center, colorize, and alpha) with the settings from the object you copied in step 1. To view an object's media effects settings, click the  button to expand the Effects controls in the Properties window or use the Crop and Adjust dialog. For more information, see "The Crop and Adjust window" on page 165.
Text properties	Replaces text settings with the settings from the text item you copied in step 1. All text properties from the Text toolbar and Transformations page of the Properties window will be pasted (the text itself is not replaced).
Size	The object is scaled to match the object you copied.
Size and position	The object is scaled to match the object you copied, and it is moved to the same position. Pasting size and position can help you create multiple menus with consistent button sizes and positions.
All	All attributes are updated.



When you have multiple objects selected when copying and pasting attributes, the software will assign attributes according to the following rules:

- If you copy a single object and paste size and position (or all attributes) to multiple selected objects, attributes will be pasted to the first object only to avoid creating overlapping objects.
- Properties are pasted from objects of the same type: text attributes are pasted to text objects, graphic properties are pasted to graphic objects, and button properties are pasted to buttons. However, you can paste size, position, and media effects between buttons and graphic objects.
- Button properties are pasted based on the order in the Project Overview window: for example, if you copy buttons 1 through 3 in one menu and then paste attributes to buttons 1 through 3 in another menu, attributes will be pasted from button 1 to button 1, button 2 to button 2, and button 3 to button 3. If you copy buttons 1 through 3 in one menu and then paste attributes to buttons 5 through 7 in another menu, attributes will be pasted from button 1 to button 5, button 2 to button 6, and button 3 to button 7.
- Properties are pasted based on object position: for example, if you copy two text objects in one menu and then paste attributes to two text objects in another menu, the attributes from each text object in the source menu will be pasted to the closest text object in the destination menu.

The navigation tool

From the Edit menu, choose Editing Tool, and then choose Navigation Tool to view and edit information about which menu button is selected when you use the Up, Down, Left, and Right buttons on your player remote control.

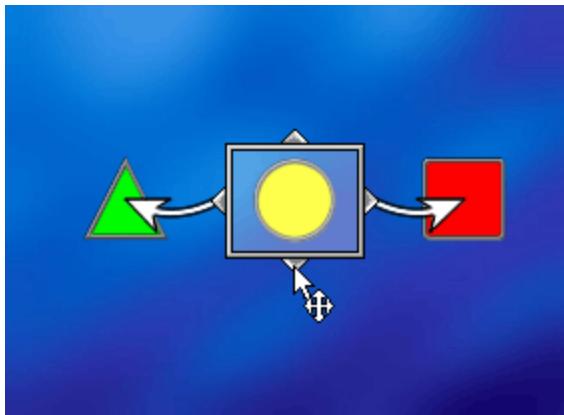


If you want to view navigation arrows even when the navigation tool is not selected, choose Workspace Overlays from the View menu, and then choose Show Navigation Overlay from the submenu. Select all buttons with the navigation overlay displayed to see all navigation arrows in the current menu.

1. Double-click a menu in the Project Overview window (or navigate in the workspace) to open the menu you want to edit.

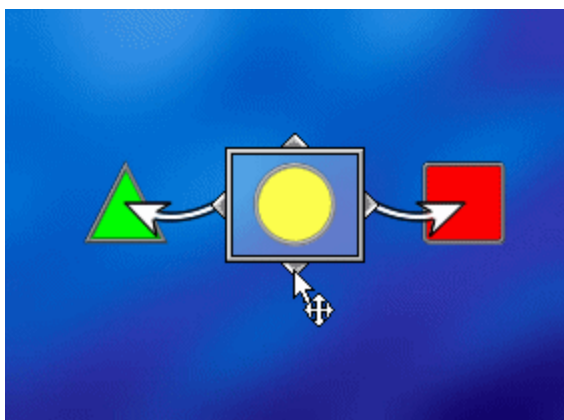
2. Select a button in the workspace with the navigation tool .

Arrows are displayed to indicate the currently assigned navigation. In the following sample, pressing the Left button on the player remote when the yellow button is selected will select the green; pressing the Right button will select the red button.



 White arrows represent autolinked navigation. Blue arrows represent links that have been manually assigned.

3. Drag the navigation anchors  to edit a button's navigation. For example, if you drag the navigation anchor on the yellow button to the red button, a user could press the Right or Down button to select the red button:



 Tips:

- Right-click a navigation anchor and choose Autolink from the shortcut menu (or double-click the anchor) if you want the software to automatically determine navigation based on button layout. The Autolink setting affects only the navigation anchor you click.
- Right-click a navigation anchor and choose Link to Self from the shortcut menu if you want to link a button to the current page.
- You can also use the navigation controls in the Button Properties window to view and edit button navigation. For more information, see "[Button Properties](#)" on page 44.

Editing object order

From the Edit menu, choose Object Order, and then choose a command from the submenu to change the order of the currently selected object.

Object order determines the layering of objects in a menu. Objects with lower numbers are displayed toward the bottom; objects with higher numbers are displayed toward the top. For example, if you select an object and move it to the top, it will obscure all other objects that are below it.



Button order and object order are independent of one another. You can edit button order using the Button Order dialog. For more information, see ["Editing button order"](#) on page 183.

To toggle the display of object order indicators in the DVD Architect window, choose Workspace Overlays from the View menu, and then choose Show Object Order from submenu.

1. Select an object.
2. From the Edit menu, choose Object Order, and then choose a command from the submenu.

Item	Description
 Move to Top	The object will appear above all other objects.
 Move to Bottom	The object will appear below all other objects.
 Move Forward	Moves the object forward one layer. The object will appear above all objects with a lower object number.
 Move Back	Moves the object back one layer. The object will appear below all objects with a higher object number.

Editing button order

From the Edit menu, choose Button Order to display the Button Order dialog, where you can set the order for buttons on the selected menu or video title.

The #1 button is the default selected button when you navigate to a menu or video title unless you've used the Destination Button control on the Action or End Action page of the Properties window to specify a different destination button.

Editing button order for a menu

1. Choose the menu you want to edit:
 - a. Select a menu in the Project Overview window.
 - b. Click the down arrow in the address bar to select a menu.
2. Click the Back to Parent , Previous Page , and Next Page  buttons in the workspace to navigate your menus.

3. From the Edit menu, choose Button Order. The Button Order dialog is displayed.

By default, the button order matches the order in which you added buttons to the menu. If you started with a blank menu and added a picture compilation and then a music/video compilation, the picture compilation would be the default (first) button.

4. Select a button and click the Move Up or Move Down buttons to change the selected button's order.
5. Repeat step 3 as needed.

For a menu, the #1 button is the default selected button. The order of subsequent buttons has no effect on your menu.

6. Click OK to close the Button Order dialog and save your changes.

Editing button order for a video

When you use buttons on video, the button order determines which button is selected by default and when playback moves across button regions.

For example, imagine you have three buttons each in three button regions:

Button Region 1	
Button 1	Director's Interview: The making of this scene
Button 2	Cast Interview: The making of this scene
Button 3	Main Menu
Button Region 2	
Button 1	Cast Interview: The making of this scene
Button 2	Director's Interview: The making of this scene
Button 3	Main Menu

When the audience plays your disc, the same button number will be selected when playback passes from one button region to the next.

Notice that button 1 and button 2 are reversed in the two button regions. If button 2 is selected, the button highlight will switch from "Cast Interview: The making of this scene" to "Director's Interview: The making of this scene" when playback switches from button region 1 to button region 2.

Use the Button Order dialog to make sure your button order is consistent throughout your video.

1. Choose the video you want to edit:
 - Double-click a video in the Project Overview window.
 - Click the down arrow in the address bar to select a video.
2. In the Timeline window, click to position the cursor in the button region you want to edit.

3. From the Edit menu, choose Button Order. The Button Order dialog is displayed.

By default, the button order matches the order in which you added buttons to the video. The first button you add is the default button.

4. Select a button and click the Move Up or Move Down buttons to change the selected button's order.
5. Repeat step 4 as needed.
6. Click OK to close the Button Order dialog and save your changes.

Music/video compilations

You can create a DVD Architect™ Pro project that contains a single music or video compilation, or you can add a music or video compilation to an existing menu.

A music/video compilation contains a list of audio or video files. You can display text (such as a song title or caption) while each file plays, and for music compilations, you can choose a video or image to display in the background.

In a video compilation, you create a series of videos that play sequentially. This sort of video compilation behaves much like a playlist, but it will be written to your disc as a single video title set. If you have a project with many short videos, this method can save you from rerendering and combining media.

 If the audio in a compilation item is longer than the video, the last frame is frozen until the end of the audio. If the video is interlaced, some DVD or Blu-ray Disc players will not display this frame correctly. Recompressing your compilation as progressive-scan video will avoid this problem.

On the Video tab of the Optimize Disc dialog, click the Progressive box and choose Yes or Auto for your music/video compilation. If you choose Yes, each compilation item is recompressed as a separate progressive-scan title. If you choose Auto, each compilation item is recompressed as a separate title and will match the format of the source media. If the audio is longer than the video, the compilation item will be recompressed as progressive-scan video to prevent artifacts when the last frame is held.

For more information, see "[Optimizing your project](#)" on page 119.

 Each title on your DVD disc can have no more than 99 chapter markers. Each title on your Blu-ray Disc can have no more than 999 chapter markers. If your compilation contains additional songs or videos beyond these limits, you can navigate to them using the Fast Forward button on your player (Previous/Next Chapter buttons allow navigation through the first 99 songs/videos for DVD, and the first 999 for Blu-ray Disc).

Adding a music or video compilation to a menu

1. Double-click a menu in the Project Overview window (or navigate in the workspace) to open the menu where you want to add a music/video compilation.
2. From the Insert menu, choose Music/Video Compilation. A button is added to the current menu as a link to the compilation.
3. Double-click the button to open the compilation. You can now add music or video and edit text and background images.

Adding audio or video to a compilation

1. Double-click a music or video compilation in the Project Overview window (or navigate in the

workspace) to open the compilation you want to edit.

2. Add audio or video files to your compilation by performing any of the following actions:

- Drag a file from the Explorer window to the Compilation window. The file is added wherever you drop it.
- Drop a file on an existing song or video to replace it.
- Double-click a file in the Explorer window. The file is added to the end of your compilation.
- Click the Insert Item button  in the Compilation window and browse to the media file you want to add.



From the Options menu, choose Auto-Insert Track Title to automatically add the media file name when you add it to your compilation.

Deleting a song or video from a compilation

Select a song or video in the Compilation window and click the Delete Items button .

Changing the audio in a compilation

1. Double-click a compilation in the Project Overview window (or navigate in the workspace) to open the compilation you want to edit.
2. Change the audio in your compilation by performing any of the following actions:
 - Select an item in the Compilation window. From the Edit menu, choose Slide Audio, and then choose Set From File from the submenu. The Set Audio dialog is displayed so you can browse to a new file.
 - Select an item in the Compilation window and click the Slide button at the top of the Music/Video Compilation Properties pane. The Audio box displays the path to the current audio file. Select the box, click the down arrow button  and choose Replace from the menu. The Open Media dialog is displayed so you can browse to a new file. For more information, see "[Music/Video Compilation Properties](#)" on page 81.
 - Drag an audio file from the Explorer window or Windows Explorer and drop it in the Compilation window.
 - Drag an audio file from the Explorer window or Windows Explorer and drop it on the audio in the Timeline window.
 - Right-click the audio in the Timeline window and choose Set Audio from the shortcut menu. The Set Audio dialog is displayed so you can browse to a new file.

Changing the video or still image in a compilation

1. Double-click a compilation in the Project Overview window (or navigate in the workspace) to

open the compilation you want to edit.

2. Change the video or still image in your compilation by performing any of the following actions:

- Select an item in the Compilation window. From the Edit menu, choose Slide Video/Image, and then choose Set from the submenu. The Set Video/Image dialog is displayed so you can browse to a new file.
- Select an item in the Compilation window and click the Slide button at the top of the Music/Video Compilation Properties pane. The Video box displays the path to the current file. Select the box, click the down arrow button  and choose Replace from the menu. The Open Media dialog is displayed so you can browse to a new file. For more information, see "[Music/Video Compilation Properties](#)" on page 81.
- Drag a video or still image file from the Explorer window or Windows Explorer and drop it in the Compilation window.
- Drag a video or still image file from the Explorer window or Windows Explorer and drop it on the video track in the Timeline window.



If you are inserting a video file, this action will replace the video *and* audio stream.

- Right-click a video or still image file in the Timeline window and choose Set Video/Image from the shortcut menu. The Set Video/Image dialog is displayed so you can browse to a new file.

Adjusting video or image stretching or scaling

1. Select a song or video in the Compilation window.
2. On the Slide page of the Music/Video Compilation Properties pane, choose a setting from the Stretch Type drop-down list to specify how the image will be scaled:

Item	Description
Letterbox	The image fills the width of the menu, and black letterboxing bars are displayed above and below or to the right and left as needed.
Zoom to Fit	The image is magnified to fill the menu. If the aspect ratio of the image doesn't match your project's aspect ratio, the image will extend beyond the screen.
Stretch to Fit	The image is stretched horizontally and vertically to fill the menu. If the aspect ratio of the image doesn't match your project's aspect ratio, the image will be distorted.

For more information, see "[Music/Video Compilation Properties](#)" on page 81.

Adding or editing text

For more information about adding, editing, and formatting text, see "[Adding and editing text](#)" on page 154.

If you want to automatically add each track's file name to the DVD Architect workspace when you add images to your compilation, choose Auto-Insert Track Title from the Options menu.

Rotating an image

1. Select a song or video in the Compilation window.
2. Click the Rotate Counterclockwise  or Rotate Clockwise  button.

Adjusting brightness and contrast or editing the image

You can use the toolbar at the top of the Compilation window to adjust the appearance of the selected slide.



You can also use the Crop and Adjust dialog to crop a slide image or adjust its appearance: select an item in the Compilation or Timeline window, and the Slide page is displayed in the Music/Video Compilation Properties pane. Select the Video box, click the down arrow button , and choose Crop and Adjust from the menu to display the Crop and Adjust dialog. If you want to edit the image in an external image editor, choose Open in Graphics Editor from the menu. For more information, see "[The Crop and Adjust window](#)" on page 165 and "[Music/Video Compilation Properties](#)" on page 81.

1. Double-click a music compilation in the Project Overview window (or navigate in the workspace) to open the music/video compilation you want to edit.

2. Select an item in the Compilation window.
3. Use the buttons in the toolbar to adjust brightness and contrast:

Item	Description
 Reset Effect Properties	Click to reset all brightness/contrast adjustments.
 Auto Levels	Click to automatically adjust the brightness and contrast. The most abundant colors (either light or dark) are enhanced. Auto levels is intended to be used on still images, but can also be used for video. When you use the effect on video, be aware that the setting will be determined by a single frame. Before opening the Crop and Adjust dialog, select a frame in the Timeline window to choose a frame that is representative of the video.
 Auto Levels (Dark)	Click to automatically adjust the brightness and contrast. The least abundant colors (either light or dark) are enhanced.
 Auto Level Channel	Click to automatically adjust brightness and contrast. Adjustment is performed independently on each color channel.
 Increase Brightness	Click to increase or decrease the brightness of the image.
 Decrease Brightness	
 Increase Contrast	Click to increase or decrease the contrast of the image.
 Decrease Contrast	
 Increase Contrast Center	Click to adjust the anchor point around which contrast is adjusted.
 Decrease Contrast Center	

 Expand the Video controls on the Slide page of the Music/Video Compilation Properties pane to see the results of your adjustments. For more information, see "[Music/Video Compilation Properties](#)" on page 81.

Changing the thumbnail size

If you want to see more slides in the Compilation window or want to see more detail, you can change the size of the thumbnails that are displayed there.

Click the Thumbnail Size button  and choose Small, Medium, or Large from the menu to adjust the size of all thumbnail images.

Adding buttons to a compilation

You can add buttons to a music/video compilation to make your discs more interactive. For example,

add a button to a compilation to take the viewer to a disc's outtakes or special features like those found on commercial discs. For more information about adding buttons, see "[Adding buttons to video](#)" on page 177.

Picture compilations

You can create a DVD Architect™ Pro project that contains a single picture compilation, or you can add a compilation to an existing menu.

A compilation contains a list of image files. You can edit the text that is displayed while each file is displayed and choose an audio file to play in the background.



Each title on your DVD disc can have no more than 99 chapter markers. Each title on your Blu-ray Disc can have no more than 999 chapter markers. If your compilation contains additional pictures beyond these limits, you can navigate to them using the Fast Forward button on your player (Previous/Next Chapter buttons allow navigation through the first 99 pictures for DVD, and the first 999 for Blu-ray Disc).

Adding a picture compilation to a menu

1. Double-click a menu in the Project Overview window (or navigate in the workspace) to open the menu where you want to add a picture compilation.
2. From the Insert menu, choose Picture Compilation. A new button is added to the menu as a link to the compilation.
3. Double-click the button to open the compilation. You can now add images and edit text and background audio.

Adding images to a compilation

1. Double-click a picture compilation in the Project Overview window (or navigate in the workspace) to open the picture compilation you want to edit.

2. Add images to your compilation by performing any of the following actions:
 - Drag a file from the Media Explorer to the Compilation window. The file is added wherever you drop it.
Drop a file on an existing slide to replace the image.
 - Double-click a file in the Explorer window. The file is added to the end of your compilation.
 - From the Insert menu, choose Slide to browse to an image file. The picture is added before the selected slide in the Compilation window.
 - From the Insert menu, choose Empty Slide if you want to add an empty slide as a placeholder. The picture is added before the selected slide in the Compilation window. You can change the image at any time.
 - Click the Insert Item button  in the Compilation window and browse to the image you want to add.
-  From the Options menu, choose Auto-Insert Slide Text to automatically add the image's file name when you add a slide.

Deleting an image from a picture compilation

Select an image in the Compilation window and click the Delete Items button .

Changing the image

1. Double-click a picture compilation in the Project Overview window (or navigate in the workspace) to open the picture compilation you want to edit.
2. Change an image in your compilation by performing any of the following actions:
 - Select an image in the Compilation window. From the Edit menu, choose Slide Image, and then choose Set from the submenu. The Set Image dialog is displayed to allow you to browse to a new file.
 - Select an image in the Compilation window and click the Slide button at the top of the Picture Compilation Properties pane. The Video box displays the path to the current image file. Select the box, click the down arrow button  and choose Replace from the menu. The Open Media dialog is displayed so you can browse to a new file.
 - Right-click an image in the in the Compilation window and choose Set Image from the shortcut menu. The Set Image dialog is displayed to allow you to browse to a new file.
 - Drag an image file from the Explorer window or Windows Explorer and drop it on an image in the Timeline window.
 - Right-click an image in the Timeline window and choose Set Video/Image from the shortcut menu. The Set Image dialog is displayed so you can browse to a new file.

Adjusting stretching or scaling

1. Double-click a picture compilation in the Project Overview window (or navigate in the workspace) to open the picture compilation you want to edit.
2. Select an image in the Compilation window.
3. On the Slide page of the Picture Compilation Properties pane, choose a setting from the Stretch type drop-down list to specify how the image will be scaled:

Item	Description
Letterbox	The image fills the width of the menu, and black letterboxing bars are displayed above and below or to the right and left as needed.
Zoom to Fit	The image is magnified to fill the menu. If the aspect ratio of the image doesn't match your project's aspect ratio, the image will extend beyond the screen.
Stretch to Fit	The image is stretched horizontally and vertically to fill the menu. If the aspect ratio of the image doesn't match your project's aspect ratio, the image will be distorted.

Rotating an image

1. Double-click a picture compilation in the Project Overview window (or navigate in the workspace) to open the picture compilation you want to edit.
2. In the Compilation window, click the image you want to rotate.
3. Click the Rotate Counterclockwise  or Rotate Clockwise  button.

Adjusting brightness and contrast or editing the image

You can use the toolbar at the top of the Compilation window to adjust the appearance of the selected slide.

 You can also use the Crop and Adjust dialog to crop a slide image or adjust its appearance: select a slide in the Compilation or Timeline window, and the Slide page is displayed in the Picture Compilation Properties pane. Select the Video box, click the down arrow button , and choose Crop and Adjust from the menu to display the Crop and Adjust dialog. If you want to edit the image in an external image editor, choose Open in Graphics Editor from the menu. For more information, see "[The Crop and Adjust window](#)" on page 165 and "[Picture Compilation Properties](#)" on page 73.

1. Double-click a picture compilation in the Project Overview window (or navigate in the workspace) to open the picture compilation you want to edit.

2. Select an image in the Compilation window.
3. Use the buttons in the toolbar to adjust brightness and contrast:

Item	Description
 Reset Effect Properties	Click to reset all brightness/contrast adjustments.
 Auto Levels	Click to automatically adjust the brightness and contrast. The most abundant colors (either light or dark) are enhanced. Auto levels is intended to be used on still images, but can also be used for video. When you use the effect on video, be aware that the setting will be determined by a single frame. Before opening the Crop and Adjust dialog, select a frame in the Timeline window to choose a frame that is representative of the video.
 Auto Levels (Dark)	Click to automatically adjust the brightness and contrast. The least abundant colors (either light or dark) are enhanced.
 Auto Level Channel	Click to automatically adjust brightness and contrast. Adjustment is performed independently on each color channel.
 Increase Brightness	Click to increase or decrease the brightness of the image.
 Decrease Brightness	
 Increase Contrast	Click to increase or decrease the contrast of the image.
 Decrease Contrast	
 Increase Contrast Center	Click to adjust the anchor point around which contrast is adjusted.
 Decrease Contrast Center	

 Expand the Video controls in the Slide portion of the Picture Compilation Properties window to see the results of your adjustments.

Setting an image's display duration from the Picture Compilation Properties window

You can adjust the duration of a slide from the Picture Compilation Properties window.

1. Double-click a picture compilation in the Project Overview window (or navigate in the workspace) to open the picture compilation you want to edit.
2. Select an image (or multiple images) in the Compilation window.

3. On the Slide page of the Picture Compilation Properties pane, select the Length box, click the down arrow button , and drag the slider (or type a value in the edit box). For more information, see "[Picture Compilation Properties](#)" on page 73.

 If you've added an audio file to your compilation, you can select the Fit compilation to audio button  to automatically adjust the duration of all slides to equal the length of the audio file.

Setting an image's display duration from the timeline

Another way to set the duration of slides is through the adjustment of markers on the timeline. This is especially helpful if you are matching your pictures to audio and want precise placement of the pictures.

1. Double-click a picture compilation in the Project Overview window (or navigate in the workspace) to open the picture compilation you want to edit.
2. In the Timeline window, a marker is automatically positioned at the beginning of each slide. To change a slide's duration, drag its marker tab  to a new position. Subsequent marker locations ripple as you drag so their slide lengths remain unchanged.

Generating slideshow animation

If you want to spice up a picture compilation, you can add animation to your static images. For example, you could pan across an image or zoom in to simulate camera motion.

For more information about generated animation in picture compilations, see "[Generating slideshow animation](#)" on page 210.

Adding or editing text

For more information about adding, editing, and formatting text, see "[Adding and editing text](#)" on page 154.

If you want to automatically add each image's file name to the DVD Architect workspace when you add images to your compilation, choose Auto-Insert Slide Text from the Options menu.

Adding audio to a compilation

1. Drag an audio file to the workspace or to an audio track in the Timeline window.

For more information about adding multiple audio tracks, see "[Adding audio tracks](#)" on page 132.

2. Select the Fit compilation to audio button  to automatically adjust the duration of all slides to match the length of the audio file.



Change a song in your compilation by performing any of the following actions:

- Drag an audio file from the Explorer window or Windows Explorer and drop it on an audio track in the Timeline window.
- Right-click an audio track in the Timeline window and choose Set Audio from the shortcut menu. The Set Audio dialog is displayed so you can browse to a new file.
- Click the Track Media button at the top of the Picture Compilation Properties pane. The Audio box displays the path to the current audio file. Select the box, click the down arrow button  and choose Replace from the menu. The Open Media dialog is displayed so you can browse to a new file.

Changing the thumbnail size

If you want to see more slides in the Compilation window or want to see more detail, you can change the size of the thumbnails that are displayed there.

Click the Thumbnail Size button  and choose Small, Medium, or Large from the menu to adjust the size of all thumbnail images.

Adding buttons to a compilation

You can add buttons to a picture compilation to make your discs more interactive. For example, add a button to a compilation to take the viewer to a disc's outtakes or special features like those found on commercial discs. For more information about adding buttons, see "[Adding buttons to video](#)" on page 177.

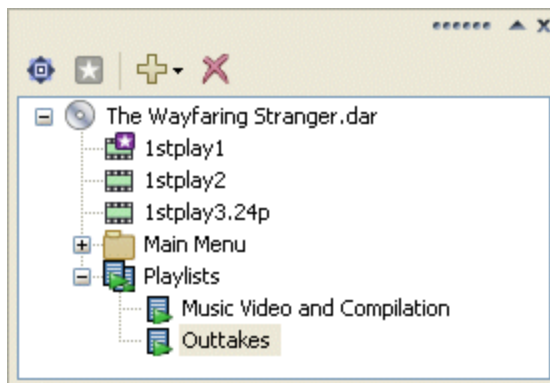
Playlists

You can use playlists in DVD Architect™ Pro software to play a sequence of movies, chapter markers, music/video compilations, or picture compilations.

Each playlist contains a user-defined sequence of movies, chapter markers, music/video compilations, or picture compilations: the list is played from start to finish, and an end action determines what happens at the end of the playlist. Unlike music/video or picture compilations, a playlist can contain only titles that are part of the disc project.

Playlists do not increase the size of your disc.

Playlists are displayed at the bottom of the Project Overview window:



Notes:

- Each playlist in a DVD project can contain a maximum of 99 titles with 99 chapters in each title.
- Each playlist in a Blu-ray Disc project can contain a maximum of 999 titles with 999 chapters in each title.

💡 If you want to create a series of videos that play sequentially, you can also create a music/video compilation made up of video files. This sort of video compilation behaves much like a playlist, but it will be written to your disc as a single video title set. If you have a project with many short videos, this method can save you from re-rendering and combining media.

Adding a playlist to a menu

1. Double-click a menu in the Project Overview window (or navigate in the workspace) to open the menu where you want to add a playlist.
2. From the Insert menu, choose Playlist. The Select Titles dialog is displayed.

3. In the Select Titles dialog, choose the titles you want to include in the playlist, and then click OK. Hold Ctrl or Shift to select multiple titles.

A button is added to the current menu as a link to the playlist.

4. To control the starting chapter, audio track, and subtitle track for each item, use the Playlist Properties pane in the Properties window. For more information, see "[Playlist Properties](#)" on page 88.
5. Use the Playlists window to rearrange, add, or delete items in the playlist. For more information, see "[The Playlists window](#)" on page 32.

Adding a playlist to your project without adding a menu link

You can use this method to build playlists, and then you can link to it from your project using buttons or end actions when you decide where you want to link to the playlist.

1. Perform one of the following actions:
 - Click the Insert Object button  in the Project Overview window and choose Playlist.
 - Right-click in the Project Overview window and choose Insert Playlist from the shortcut menu.
 - Click the Insert Playlist button  in the Playlists window.

The Select Titles dialog is displayed.

2. In the Select Titles dialog, choose the titles you want to include in the playlist, and then click OK. Hold Ctrl or Shift to select multiple titles.
3. To control the starting chapter, audio track, and subtitle track for each item, use the Playlist Properties pane in the Properties window. For more information, see "[Playlist Properties](#)" on page 88.
4. Use the Playlists window to rearrange add, or delete items in the playlist. For more information, see "[The Playlists window](#)" on page 32.

Adding items to a playlist

1. Double-click a playlist in the Project Overview window (or choose a playlist from the drop-down list at the top of the Playlists window) to open the playlist you want to edit.
2. Add items to your playlist:
 - a. Click the Insert Playlist Items button  in the Playlists window toolbar to display the Select Titles dialog.
 - b. Select the titles you want to add to your playlist.
 - c. Click OK.



You can also drag titles from the Project Overview window to the Playlists window.

3. To control the starting chapter, audio track, and subtitle track for each item, use the Playlist Properties pane in the Properties window. For more information, see "[Playlist Properties](#)" on page 88.

Removing items from a playlist

1. Double-click a playlist in the Project Overview window (or choose a playlist from the drop-down list at the top of the Playlists window) to open the playlist you want to edit.
2. Select an item in the Playlists window.
3. Press Delete.

Arranging items in a playlist

1. Double-click a playlist in the Project Overview window (or choose a playlist from the drop-down list at the top of the Playlists window) to open the playlist you want to edit.
2. Drag items in the Playlists window to change their order.

Editing playlist item properties, setting playback order, or setting a playlist's end action

Use the Playlist Properties pane in the Properties window to edit settings for each item in a playlist, specify the playback order, or set the playlist's end action. For more information, see "[Playlist Properties](#)" on page 88.

Renaming a playlist

1. Right-click a playlist in the Project Overview window and choose Rename from the shortcut menu.
2. Type a new name in the edit box.
3. Press Enter.

Making the Next button follow playlist order

When using playlists, you may find that the Previous and Next buttons on the DVD or Blu-ray Disc remotes don't navigate to the previous/next title in the playlist.

You can correct the navigation by using the Order Titles dialog.

1. Double-click a playlist in the Project Overview window.
The contents of the playlist are displayed in the Playlists window.
2. From the File menu, choose Order Titles.
3. Use the Order Titles dialog to set the title order on the disc to match the playlist order.
4. Click the OK button to close the Order Titles dialog.

Single-movie discs and titles

You can create a DVD Architect™ Pro project that contains a single video file, or you can add a video title to an existing menu.

You can use the Timeline window to set the in and out points of your movie and add chapter markers. The right half of the window allows you to change the source video and audio files.

For information about creating a single-movie disc with scene selection, see "[Adding a scene selection menu](#)" on page 157.

Adding a video title to a menu

1. Double-click a menu in the Project Overview window (or navigate in the workspace) to open the menu where you want to add a movie.
2. From the Insert menu, choose Media and browse to a media file. A button is added to the menu as a link to the video.



Select the Automatically link similar audio and video files check box on the General tab of the Preferences dialog if you want the software to look for and link audio files with the same base name when you add a video-only file to your project.

For example, if you had a video-only MPEG file (MyProject.mpg) and an audio file (MyProject.wav) in the same folder, the software will automatically use MyProject.wav as the audio track when you add MyProject.mpg to a menu.

For more information, see "[General Preferences](#)" on page 276.

3. Double-click the movie's menu button to open the video. You can now edit the movie.

Setting in and out points

If you don't want to burn the complete media file to your disc, you can use the Timeline window to set new in and out points to trim your media. For more information, see "[Setting in and out points for video titles](#)" on page 25.

Adding chapter markers

Chapter markers mark different sections of your project. You can place chapter markers in your video file for viewers to use as navigation points to skip through the project.

Use the Timeline window to add chapter markers. For more information, see "[Inserting markers](#)" on page 26.

You can also use chapter markers to manually create scene-selection menus or link to chapter markers with end actions. For more information, see "[Adding a scene selection menu](#)" on page 157.

Changing the video or audio file

To replace a video title's video or audio file, use the Track Media page in the Media Properties pane in the Properties window.

You can also right-click a track in the Timeline window and choose Set Video/Image or Set Audio from the shortcut menu to browse to a new file.

For more information, see "[Media Properties](#)" on page 67.

Adding a button to a video title

You can add a button to your video title for even greater interactivity. For example, add a button to a video title to take the viewer to a disc's outtakes.

For information about adding buttons on video, see "[Adding buttons to video](#)" on page 177.

Keyframe animation

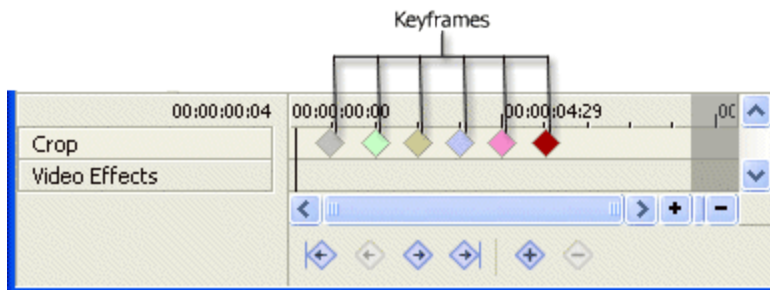
Keyframes can be used in DVD Architect™ Pro to animate objects by cropping them or changing their size or position over time. Your keyframes define the state of an object's settings at a given point in time.

Each keyframe contains a set of parameters for a specified point on the timeline. The settings for intermediate frames are interpolated. Additional keyframes can be added to create more complex effects.

Crop and video effects keyframes are created using the Crop and Adjust window, while transformation (size and position) keyframes are created using the Timeline window.

Crop and video effects keyframes

Using keyframes, you can gradually crop or change the color or brightness of your video and graphics over time to create an animated effect. For example, you could use this feature to make a button gradually fade in or fade out of a menu. The Keyframe Controller, displayed at the bottom of the Crop and Adjust dialog, allows you to add and remove keyframes and control the parameters for individual keyframes.



 Animated button highlights are not supported. If a button has keyframe animation applied, button highlighting is not animated or may not be visible when you burn your project to disc. You will see the button highlighting when you preview your DVD Architect project, but not after it is burned to disc.

Adding a keyframe

1. In the Keyframe Controller, click to position the cursor where you want to add a keyframe.
2. Click the Insert Keyframe button . A keyframe is added to the Keyframe Controller timeline.

The new keyframe's attributes are copied from the previous keyframe. This is helpful if you want to make small, subtle changes from one keyframe to the next.

 To quickly add a keyframe, double-click on the Keyframe Controller timeline, or position the cursor on the Keyframe Controller timeline and modify your Crop and Adjust Properties settings.

Removing a keyframe

1. Select a keyframe by clicking it.
2. Click the Delete Keyframe button .

Navigating between keyframes

- To jump to the next or previous keyframe, click the Previous Keyframe  and Next Keyframe  buttons (or press Ctrl+Left Arrow or Ctrl+Right Arrow).
- To jump to the first or last keyframe, click the First Keyframe  or Last Keyframe  button.

Changing the interpolation curve between keyframes

The interpolation curve determines the rate of animation between two keyframe settings. To change the interpolation curve, right-click a selected keyframe and choose a command from the shortcut menu. The curve type is updated for all selected keyframes.

Command	Description	Looks Like
Linear 	Keyframe parameters are interpolated in a linear path.	
Fast 	Keyframe parameters are interpolated in a fast logarithmic path.	
Slow 	Keyframe parameters are interpolated in a slow logarithmic path.	
Smooth 	Keyframe parameters are interpolated along a smooth, natural curve.	
Sharp 	Keyframe parameters are interpolated along a sharp curve.	
Hold 	No animation will take place. The keyframe's settings will be maintained until the next keyframe.	

Moving keyframes

After you've set your keyframes, you may need to adjust their positions along the Keyframe Controller timeline. Drag a keyframe to a new position in the timeline to change its position.

Hold Ctrl or Shift while clicking to select multiple keyframes. A selected keyframe is displayed as , and an unselected keyframe is displayed as a .

Editing crop settings

After you've inserted your keyframes, you can use the Crop controls in the Crop and Adjust window's Properties pane to specify your cropping settings for individual keyframes.

1. In the Keyframe Controller, select the keyframe you want to edit.
2. In the Properties pane, click the expand button  next to the Crop box to display the controls.
3. Edit the crop settings. For more information, see "[The Crop and Adjust window](#)" on page 165.

Transformation keyframes

Transformation keyframes allow you to change the size and position of a graphic over time, creating an animated effect. For example, you could use this feature to make a menu's button appear to move or to fly in from offscreen, or you could hide a menu's button until playback reaches the loop point.

Transformation keyframes are inserted and displayed in the timeline below your video track, and the keyframe size and position changes can be edited in the Properties window and in the workspace. You can use this feature for menus, picture compilations, and music/video compilations.

Using the timeline, you can drag keyframes to adjust their position, add and delete keyframes, and change the interpolation curve between keyframes.



Notes:

- Crop and video effect keyframes are set in the Crop and Adjust window and are not visible in the timeline.
- To insert transformation keyframes for a button, Show Before Loop Point must be set to Yes for the object in the Transformations page in the item's Properties window, and the loop point must be set to a point later than 00:00:00.000 on the timeline. For more information, see "[Setting project properties](#)" on page 106 and "[Setting looping points for menus](#)" on page 156.
- Transformation keyframes are not available for buttons on video or for graphics inserted on video titles.

Add a keyframe

1. In the workspace, select the item to which you want to add a keyframe.
2. In the Timeline window, right-click in the Transformations keyframe bar below your video track and choose Insert from the shortcut menu. A keyframe is added to the Transformation keyframe bar.

- Subsequent keyframe's attributes are copied from the previous keyframe.



To quickly add a keyframe, perform any of the following steps:

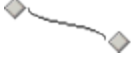
- Double-click on the Transformation keyframe bar.
- Position the cursor on the Transformation keyframe bar and modify your Transformation properties in the Properties window. For more information, see ["Setting project properties"](#) on page 106.
- Select the keyframe tool in the workspace and drag the object. For more information, see ["The keyframe tool"](#) on page 212.

Remove a keyframe

Right-click a keyframe and choose Delete from the submenu.

Change the interpolation curve between keyframes

The interpolation curve determines the rate of animation between two keyframe settings. To change the interpolation curve, right-click a selected keyframe and choose a command from the shortcut menu. The curve type is updated for all selected keyframes.

Command	Description	Looks Like
Linear 	Keyframe parameters are interpolated in a linear path.	
Fast 	Keyframe parameters are interpolated in a fast logarithmic path.	
Slow 	Keyframe parameters are interpolated in a slow logarithmic path.	
Smooth 	Keyframe parameters are interpolated along a smooth, natural curve.	
Sharp 	Keyframe parameters are interpolated along a sharp curve.	
Hold 	No animation will take place. The keyframe's settings will be maintained until the next keyframe.	

Move keyframes

After you've set your keyframes, you may need to adjust their positions along the timeline. Drag a keyframe to a new position in the timeline to change its position.

Hold Ctrl or Shift while clicking to select multiple keyframes. A selected keyframe is displayed as , and an unselected keyframe is displayed as a .

Edit size and position settings

After you've inserted a keyframe, you can set the size and/or position settings for the object in the Transformation page of the Properties window.



You can use the keyframe tool in the workspace for a visual representation of an item's keyframe size and position settings. For more information, see "[The keyframe tool](#)" on page 212.

1. In the workspace, select the object to which you have added keyframes.
2. In the Properties window, click the Transformations button.
3. Edit the size and position settings on the Transformations page. For more information, see "[The Properties window](#)" on page 42.

Animating buttons with keyframes

Now that you've learned how keyframes work in DVD Architect, we're going to show you how you can use keyframes to make buttons fade or fly in to a menu.

Moving a button into position on a menu

1. Double-click a menu in the Project Overview window (or navigate in the workspace) to open the menu you want to edit.
2. On the General page of the Menu Page Properties pane, verify that the menu length is long enough to accommodate the animation and that the menu loop point is set to the point where you want menu animation to end. For more information, see "[General](#)" on page 56.
3. In the workspace, select the button you want to animate. The Button Properties pane is displayed in the Properties window.
4. On the Transformations page in the Button Properties pane, click the Show before loop point box, click the down arrow button  and choose Yes from the menu so you can animate the button before the loop point. For more information, see "[Transformations](#)" on page 45.
5. Add keyframes to move the button:
 - a. Right-click the Transformations keyframe bar below your video track and choose Insert from the shortcut menu. A keyframe is added to the transformation keyframe bar.
 - b. Drag the keyframe to the beginning of the timeline.
 - c. Using the keyframe tool  in the workspace, drag the button to the position where you want its motion to begin. For more information, see "[The keyframe tool](#)" on page 212.

You can also use the Transformations page in the Button Properties pane to edit the button position.
 - d. Double-click the Transformations keyframe bar to create the next keyframe.

- e. Use the keyframe tool to position the button for the next keyframe.
 - f. Repeat steps d and e as needed to create your button motion.
6. Set the button's final position:
- a. Position the last keyframe so it matches the menu's loop point marker in the Timeline window.
 - b. Use the keyframe tool in the workspace to set the button's final position.

Preview your menu and edit keyframes as needed.

Fade a button in to make it appear gradually

1. Double-click a menu in the Project Overview window (or navigate in the workspace) to open the menu you want to edit.
2. On the General page of the Menu Page Properties pane, verify that the menu length is long enough to accommodate the animation and that the menu loop point is set to the point where you want menu animation to end. For more information, see "[General](#)" on page 56.
3. In the workspace, select the button you want to animate. The Button Properties pane is displayed in the Properties window.
4. On the Transformations page in the Button Properties pane, click the Show before loop point box, click the down arrow button  and choose Yes from the menu so you can animate the button before the loop point. For more information, see "[Transformations](#)" on page 45.
5. Make the button transparent at the beginning of the menu:
 - a. Right-click the button in the workspace and choose Crop and Adjust from the shortcut menu. The Crop and Adjust dialog is displayed.
 - b. Click to position the cursor at the beginning of the timeline in the keyframe controller.
 - c. Click the Insert Keyframe button .
 - d. Click the Alpha box in the Crop and Adjust Properties box and click the down arrow button  to display a slider.
 - e. Drag the Alpha slider to the left to make the button transparent.
6. Make the button opaque at the menu's loop point:
 - a. In the Timeline window, click the menu's loop point marker. The cursor in the Crop and Adjust Keyframe Controller is updated to match this position.
 - b. In the Crop and Adjust window, click the Insert Keyframe button .
 - c. Click the Alpha box in the Crop and Adjust Properties box and click the down arrow button  to display a slider.
 - d. Drag the Alpha slider to the right to make the button opaque.

During playback, your button is not visible when the menu starts, and it fades in gradually until the menu's loop point, when it is fully opaque.

Generating slideshow animation

If you want to spice up a picture compilation, you can add animation to your static images. For example, you could pan across an image or zoom in to simulate camera motion.



Generated animation is created by inserting a crop keyframe at the beginning and end of each picture. Any cropping applied via the Crop and Adjust dialog will be overwritten when you generate slideshow animation.

1. Double-click a picture compilation in the Project Overview window (or navigate in the workspace) to open the picture compilation you want to edit.
2. In the Compilation window, select the pictures you want to animate, or press Ctrl+A to generate animation for all pictures.



Select a single image when you want to be able to control the specific type of animation that is used for that image. For example, what if you wanted to use pan or zoom animation throughout a picture compilation but wanted to be sure to use panning on a wide landscape image?

Press Ctrl+A to select all images in the compilation. You can then use the Generate Slideshow Animation dialog to set up pan or zoom animation throughout the compilation.

Next, click the landscape image to select it (and remove the other images from the selection). You can now use the Generate Slideshow Animation dialog to set up panning animation for that image.

3. Click the Generate Slideshow Animation button  in the Compilation window. The Generate Slideshow Animation dialog is displayed.
4. Select the Animation box, click the down arrow button , and choose the type of animation you want to create:

Setting	Description
Pan only	Crops the image and moves the crop rectangle across the picture to create the appearance of your still images moving across the screen. You can choose the direction and speed of the motion.
Zoom only	Crops the image and changes the size of the crop rectangle over time to zoom in or out. You can choose whether you want to zoom in, out, or both, and set the maximum zoom level.
Pan or zoom	Panning or zooming is applied to each picture.
Pan and zoom	Panning and zooming are applied to each picture.

5. If you want to crop the image before applying animation, select the Edge crop box, click the down arrow button , and drag the slider to set the percentage you want to offset the crop rectangle from the original image size.
6. If you selected Pan only, Pan or zoom, or Pan and zoom in step 4, use the Panning controls to fine-tune the pan animation that will be applied to your images.

Control	Description
Direction	Select the box, click the down arrow button  , and choose a setting from the menu to set the direction for panning.
Speed	Select the box, click the down arrow button  , and drag the slider to set the panning speed.

7. If you selected Zoom only, Pan or zoom, or Pan and zoom in step 4, use the Zooming controls to fine-tune the zoom animation that will be applied to your images.

Control	Description
Direction	Select the box, click the down arrow button  , and choose a setting from the menu to choose whether you want to zoom in, out, or alternate between images.
Maximum zoom	Select the box, click the down arrow button  , and drag the slider to set the maximum zoom level. If you use the Edge crop control to crop the image, the maximum zoom is based on the edge-cropped image.

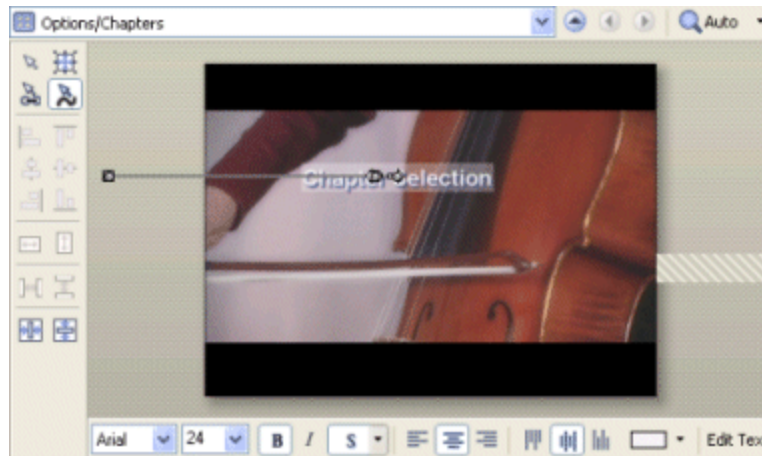
8. If you want the cropped images to match the aspect ratio of your DVD Architect project, select the Match output aspect box, click the down arrow button , and choose Yes from the menu. Forcing the crop rectangle to match the project aspect ratio prevents the likelihood of seeing black borders around your pictures.
9. Click OK to close the dialog and generate the animation. A Crop and Adjust keyframe is created at the beginning and end of each slide to create animation.
10. Click the Preview button  to preview your settings.
11. If you need to change your settings or fine-tune the animation, you can use either of the following procedures:
12. Select the picture you want to adjust in the Compilation window, click the Generate Slideshow Animation button , and use the Generate Slideshow Animation dialog.
13. For even more control, use the Keyframe Controller in the Crop and Adjust dialog to adjust individual keyframes for each picture. With this method, you can control the exact position of the crop rectangle for precise control over the pan or zoom animation. For more information, see "[Crop and video effects keyframes](#)" on page 204.

The keyframe tool

From the Edit menu, choose Editing Tool, and then choose Keyframe Tool to view and edit information about the size and position changes defined by an object's transformation keyframes.

💡 If you want to view size and position changes even when the keyframe tool is not selected, choose Workspace Overlays from the View menu, and then choose Show Keyframe Overlay from the submenu. Select objects with the keyframe overlay displayed to see a graphical display of size and position changes for the object.

1. Double-click a menu in the Project Overview window (or navigate in the workspace) to open the menu you want to edit.
2. Select an object in the workspace and add transformation keyframes. For more information, see "[Transformation keyframes](#)" on page 206.
3. Select the object in the workspace again with the keyframe tool . Lines and arrows are displayed to indicate the currently assigned path. Control points mark the location of keyframes along the path.



4. Drag the keyframe control points to edit an object's position or path. Using the control points, you can also create Bézier curves that the object will follow during the animation. If you have multiple keyframes, you can edit the intermediate control points by right-clicking and choosing an option from the shortcut menu:

Item	Description
Smooth	The tangent control is a straight line pivoting about the control point at its center. Changing the length of either half of the tangent changes the other half equally.
Straight	The tangent control is a straight line pivoting about the control point at its center. You can change the length of either half of the tangent independently.
Corner	The tangent control is hinged with the control point at its center. You can rotate or change the length of each half of the tangent independently.



These settings cannot be applied to end control points, which mark the first and last keyframes in a series.



You can also use the Transformations page in the Properties window to view and edit object size and position. For more information, see "[The Properties window](#)" on page 42.

Working with stereoscopic 3D media on Blu-ray Disc

When creating a Blu-ray Disc project, you can use Vegas Pro to render stereoscopic video for your project.



The following features are not available for 3D titles:

- Buttons on video
- Crop and adjust
- The Recompress control in the Optimize Disc dialog
- The Reduce interlace flicker control on the Media Properties pane

1. Shoot your 3D video with a 3D camera.
2. Import your 3D video into a stereoscopic 3D Vegas Pro project.
3. Render your clip using the AVC/MVC plug-in with one of the following templates:
 - MVC 1280x720-60p, 25 Mbps video stream
 - MVC 1280x720-50p, 25 Mbps video stream
 - MVC 1920x1080-24p, 25 Mbps video stream

Rendering using these templates creates BD-compliant video streams that will be burned to disc with no recompression.

Two files will be created when you render your stereoscopic 3D video. The base stream is a full-resolution 2D AVC video, and the dependent stream is an MVC video that contains video data for the other eye.

4. When rendering is complete, add your base (.avc) stream to your DVD Architect™ Pro project as you would add standard 2D media. DVD Architect will automatically detect the dependent (.mvc) stream.

You can mix 2D and 3D media in a single project, but menus are displayed only in 2D.



If you want to burn a 3D video in 2D for your project, you can remove the dependent stream from the folder where the base stream is saved.

5. **Prepare** and **burn** your project to disc.



When you preview a 3D video, only the base stream will be displayed.

Using scripting

Scripting in DVD Architect™ Pro gives you even more options for creativity when designing your DVD. Among other things, you can customize the play order of your DVD, create simple games, and add navigation clues. The scripting feature in DVD Architect is based on the DVD-Video specification.



Scripting is not available for Blu-ray Disc projects.

The following are some examples of what you can do with scripting in DVD Architect:

- Create a quiz-style game which keeps score based on the user's selections and customizes the result based on the score.
- Play random videos.
- Choose menus or videos to play based on the player's language, parental management, and other settings.
- Require a passcode to "unlock" the disc for playback.

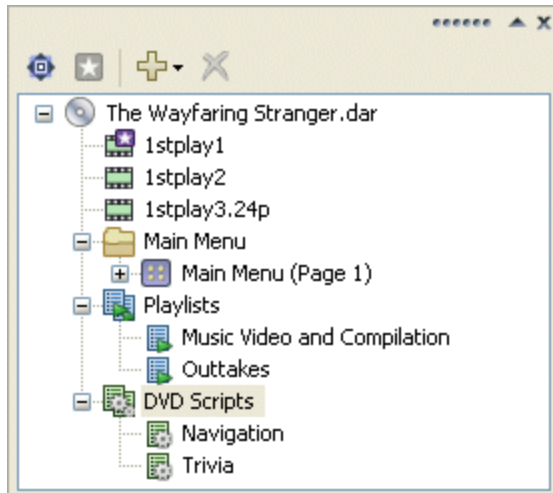
Scripts have two main functions for DVD playback: jumping to a new location (such as a track or menu) or playing a different stream (audio, video, or subtitle). You can assign a script to almost anything in your project that supports scripts, such as menus, buttons, and end actions.

Each script can contain any combination of three statement types: commands, labels, or comments.

- Commands execute an action for a step in your script. Commands can utilize the standard capabilities in most DVD players, allowing you to further expand and customize your options for DVD playback. These DVD player functions are accessed by the script command using the player's General Purpose Register Memories (GPRMs) and System Parameter Register Memories (SPRMs). For more information, see "[General Purpose Register Memories \(GPRM\)](#)" on page 220 and "[System Parameter Register Memories \(SPRMs\)](#)" on page 220.
- Labels are used to mark sections of a script to which you want to link. You can link from one section of a script to another using your defined label.
- Comments are used within the script to help you identify and track the purpose of statements. Comments are ignored by the script.

Scripts are created using the DVD Scripts window, and script statements are defined using the Script Properties window.

Once you've inserted a DVD script, it is displayed at the bottom of the Project Overview window:



 Your project can contain up to 4,095 scripts.

Creating a DVD script

1. Double-click a menu in the Project Overview window (or navigate in the workspace) to open the menu where you want to add a DVD script.
2. From the Insert menu, choose DVD Script.
A button is added to the current menu as a link to the script.
3. Use the DVD Scripts window to rearrange add, or delete statements in the script. For more information, see "[The DVD Scripts window](#)" on page 33.

Adding an existing script to a menu or object

To add an existing script to a menu or object, drag a script from the DVD Scripts heading in the Project Overview window to the item in the workspace.

Inserting a statement in a script

1. Double-click a DVD script in the Project Overview window (or choose a script from the drop-down list at the top of the DVD Scripts window) to open the script you want to edit.
2. In the DVD Scripts window, click the line where you want to insert a statement.
3. Click Insert Statement . The new statement is inserted above the selected line.
4. Edit your statement in the Script Properties window. For more information, see "[Script Properties](#)" on page 91.

Appending a statement to a script

1. Double-click a DVD script in the Project Overview window (or choose a script from the drop-

down list at the top of the DVD Scripts window) to open the script you want to edit.

2. Click Append Statement . The new statement is appended to the end of your script.
3. Edit your statement in the Script Properties window. For more information, see "[Script Properties](#)" on page 91.

Removing a statement from a script

1. Double-click a DVD script in the Project Overview window (or choose a script from the drop-down list at the top of the DVD Scripts window) to open the script you want to edit.
2. Select a statement in the DVD Scripts window.
3. Press Delete or click Delete Statement .

Rearranging statements in a script

1. Double-click a DVD script in the Project Overview window (or choose a script from the drop-down list at the top of the DVD Scripts window) to open the script you want to edit.
2. Drag statements in the DVD Scripts window up or down to change their order.

Editing a script's properties/statements

Use the Script Properties controls in the Properties window to edit properties for each statement in a script. For more information, see "[Script Properties](#)" on page 91.

Testing a script

Use the Preview window to play your project and test your scripts. For more information, see "[Testing DVD scripts](#)" on page 219.

Renaming a script

1. Right-click a DVD script in the Project Overview window and choose Rename from the shortcut menu.
2. Type a new name in the edit box.
3. Press Enter.

Deleting a script

Right-click a DVD script in the Project Overview window and choose Delete from the shortcut menu.

Setting a DVD start script

A DVD start script is the script that will execute when the DVD is inserted in a DVD player. This script takes precedence over the item you've designated as your DVD start item. For more

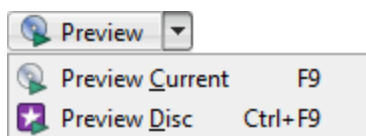
information, see ["Setting the disc start item"](#) on page 29.

To set your DVD start script, right-click a DVD script in the Project Overview window and choose DVD Start Script from the shortcut menu.

 You can also set the DVD start script in the Disc Properties section of the Project Properties window. For more information, see ["Setting project properties"](#) on page 106.

Testing DVD scripts

You can use the Script Debugger pane in the Preview window to test and debug your DVD scripts. To access the preview frame, click the down arrow next to the Preview button to choose a preview mode:



- Choose Preview Current to begin the preview with the current page.
- Choose Preview Disc to begin the preview at the beginning of your disc.

Once the Preview frame is displayed, click the DVD Script Debugger button  to display the Script Debugger pane at the bottom of the Preview frame.

For more information about creating scripts in your project, see ["Using scripting"](#) on page 216.

 Scripting is not available for Blu-ray Disc projects.

Item	Description
	Step Next Click to skip to the next command line in the script.  You can also press Shift+F5.
	Run Click to run the script from the current breakpoint.  You can also press F5.
	Toggle Breakpoint Click to insert a breakpoint to the currently selected command(s) or label(s) in the script. During script debugging, playback will stop at the breakpoint until you resume by clicking the Run button.  You can also press Ctrl+R.
Current script	Choose a script from the drop-down list to specify the script you want to display.
#/Command list	Displays the steps and commands in the script.  Use the scroll bar to view additional areas of the script.
SPRMs/GPRMs	Click the SPRMs or GPRMs button to view the current settings for both memory registers.

General Purpose Register Memories (GPRM)

DVD scripts use General Purpose Register Memories (GPRM) to temporarily store values or assets assigned by a script command. For example, you can assign a GPRM's value to another GPRM's value, an SPRM's value, a number, or link to an asset in your project.

Since only six GPRMs (0-5) are available for storage, you should attempt to plan your script ahead of time and use the GPRMs wisely.

System Parameter Register Memories (SPRMs)

DVD and Blu-ray Disc players use variables, called System Parameter Register Memories (SPRMs), to specify the current settings for the player, such as the audio stream, camera angle, or parental level. You can use the power of scripting in DVD Architect to access these variables during the navigation and playback of your disc, allowing you to customize the viewing experience based on certain conditions.



Scripting is not available for Blu-ray Disc projects.

The SPRMs are defined below:

SPRM	Description
0	Menu language code
1	Audio track number
2	Subtitle track number
3	Video angle number
4	Title number
5	Video title set (VTS) number
6	Title program chain number
7	Chapter number
8	Highlighted button number
9	Navigation timer
10	Navigation timer destination (which track to play when navigation timer in SPRM 9 expires)
11	Player audio mixing mode for karaoke
12	Country code for parental management
13	Parental management level
14	Player configuration for video
15	Player configuration for audio
16	Initial audio language code
17	Initial audio language code extension
18	Initial subtitle language

SPRM	Description
19	Initial subtitle language extension
20	Player region code
21	Reserved
22	Reserved
23	Reserved

Using a Script to Set the Menu Language

If you're creating a disc that you want to distribute to a wide audience, you might want to create a set of menus for each language.

You can then use [scripting](#) to detect the player's menu language code and display the appropriate menus.



Scripting is not available for Blu-ray Disc projects.

For this example, let's assume we have a DVD with a single menu and that we want to distribute the DVD to English-, Spanish-, and French-speaking audiences.

1. Create your DVD and [add a menu](#) for each language.

2. Create a script to detect the DVD player's language code and display the corresponding menu:

- a. Click the Insert Object button  in the Project Overview window and choose DVD Script .
- b. Right-click the new script in the Project Overview window, choose Rename from the shortcut menu, and then type Script - Menu Selection to give the script a descriptive name.
- c. Click the Insert Statement button  in the DVD Scripts window to add a new statement to store the player's menu language code (SPRM0) in memory location GPRM0:

Property	Value
Statement type	Command
Command	Set GPRM
Target	GPRM0
Operator	:=
Source	SPRM
SPRM	SPRM0 [Menu language code]
Condition	None

- d. Click the Insert Statement button  in the DVD Scripts window to add a new statement to go to the beginning of the menu named "English" and select the default button if the player's menu language code (SPRM0) is English (25966). Adjust the controls in the [Script Properties](#) window as follows:

Property	Value
Statement type	Command
Command	Link
Destination	English
Destination item	Start
Destination button	Default
Condition	=
Left operand	GPRM
GPRM	GPRM0
Right operand	Value
Value	25966

- e. Click the Insert Statement button  in the DVD Scripts window to add a new statement to go to the beginning of the menu named "Spanish" and select the default button if the player's menu language code (SPRM0) is Spanish (25971). Adjust the controls in the Script Properties window as follows:

Property	Value
Statement type	Command
Command	Link
Destination	Spanish
Destination item	Start
Destination button	Default
Condition	=
Left operand	GPRM
GPRM	GPRM0
Right operand	Value
Value	25971

- f. Click the Insert Statement button  in the DVD Scripts window to add a new statement to go to the beginning of the menu named "French" and select the default button if the player's menu language code (SPRM0) is French (26226). Adjust the controls in the Script Properties window as follows:

Property	Value
Statement type	Command
Command	Link
Destination	French
Destination item	Start
Destination button	Default
Condition	=
Left operand	GPRM
GPRM	GPRM0
Right operand	Value
Value	26226

3. Right-click the Script - Menu Selection script in the [Project Overview](#) window and choose DVD Start Script from the shortcut menu to set it as the start script for your project.



You can also set the DVD start script in the Disc Properties section of the [Project Properties](#) window.

4. [Prepare and burn](#) your project.

When the DVD is inserted in a player, your script is run automatically. It reads the menu language code from the player and saves in it GPRM0. The script then reads the value of GPRM0 and displays the menu page that corresponds to the menu language code.

Language Codes

The following table lists the language codes supported by DVD Architect software.

Use the number from the Value column when writing [scripts](#).

Language	Code	Value
Abkhazian	ab	24930
Afar	aa	24929
Afrikaans	af	24934
Albanian	sq	29553
Amharic	am	24941
Arabic	ar	24946
Armenian	hy	26745
Assamese	as	24947
Aymara	ay	24953
Azerbaijani	az	24954
Bashkir	ba	25185
Basque	eu	25973
Bengali	bn	25198
Bhutani	dz	25722
Bihari	bh	25192
Bislama	bi	25193
Breton	br	25202
Bulgarian	bg	25191
Burmese	my	28025
Byelorussian	be	25189
Cambodian	km	27501
Catalan	ca	25441
Chinese	zh	31336
Corsican	co	25455
Croatian	hr	26738
Czech	cs	25459
Danish	da	25697

Language	Code	Value
Dutch	nl	28268
English	en	25966
Esperanto	eo	25967
Estonian	et	25972
Faroese	fo	26223
Fiji	fj	26218
Finnish	fi	26217
French	fr	26226
Frisian	fy	26233
Galician	gl	26476
Georgian	ka	27489
German	de	25701
Greek	el	25964
Greenlandic	kl	27500
Guarani	gn	26478
Gujarati	gu	26485
Hausa	ha	26721
Hebrew	iw	26999
Hindi	hi	26729
Hungarian	hu	26741
Icelandic	is	26995
Indonesian	in	26990
Interlingua	ia	26977
Interlingue	ie	26981
Inupiak	ik	26987
Irish	ga	26465
Italian	it	26996
Japanese	ja	27233
Javanese	jw	27255
Kannada	kn	27502
Kashmiri	ks	27507
Kazakh	kk	27499
Kinyarwanda	rw	29303
Kirghiz	ky	27513
Kirundi	m	29294

Language	Code	Value
Korean	ko	27503
Kurdish	ku	27509
Laothian	lo	27759
Latin	la	27745
Latvian	lv	27766
Lingala	ln	27758
Lithuanian	lt	27764
Macedonian	mk	28011
Malagasy	mg	28007
Malay	ms	28019
Malayalam	ml	28012
Maltese	mt	28020
Maori	mi	28009
Marathi	mr	28018
Moldavian	mo	28015
Mongolian	mn	28014
Nauru	na	28257
Nepali	ne	28261
Norwegian	no	28271
Occitan	oc	28515
Oriya	or	28530
Oromo	om	28525
Pashto	ps	28787
Persian	fa	26209
Polish	pl	28780
Portuguese	pt	28788
Punjabi	pa	28769
Quechua	qu	29045
Rhaeto-Romance	rm	29293
Romanian	ro	29295
Russian	ru	29301
Samoan	sm	29549
Sangho	sg	29543
Sanskrit	sa	29537
Scots Gaelic	gd	26468

Language	Code	Value
Serbian	sr	29554
Serbo-Croatian	sh	29544
Sesotho	st	29556
Setswana	tn	29806
Shona	sn	29550
Sindhi	sd	29540
Sinhalese	si	29545
Siswati	ss	29555
Slovak	sk	29547
Slovenian	sl	29548
Somali	so	29551
Spanish	es	25971
Sundanese	su	29557
Swahili	sw	29559
Swedish	sv	29558
Tagalog	tl	29804
Tajik	tg	29799
Tamil	ta	29793
Tatar	tt	29812
Telugu	te	29797
Thai	th	29800
Tigrinya	ti	29801
Tonga	to	29807
Tsonga	ts	29811
Turkish	tr	29810
Turkmen	tk	29803
Twi	tw	29815
Ukrainian	uk	30059
Urdu	ur	30066
Uzbek	uz	30074
Vietnamese	vi	30313
Volapuk	vo	30319
Welsh	cy	25465
Wolof	wo	30575
Xhosa	xh	30824

Language	Code	Value
Yiddish	ji	27241
Yoruba	yo	31087
Zulu	zu	31349

Region Codes

When you set a region code (1-8) for a project, a SPRM20 value is automatically inserted in the [Script Debugger pane](#).



The SPRM20 value may not be changed manually.

If your disc is encoded for multiple regions, the [SPRM](#) value allows your player to read the bitmask and determine if the player is compatible with the disc. The region codes and the corresponding SPRM codes are listed below.

Region Code	Description	SPRM20 Value
1	North America	1
2	Japan, Europe, Middle East, South Africa, and Greenland	2
3	Southeast Asia and Hong Kong	4
4	Australia, New Zealand, Mexico, South America, Central America, the Pacific Islands, and the Caribbean	8
5	Northwest Asia (including Korea) and North Africa	16
6	China	32
7	Reserved	N/A
8	Airplanes (In-flight entertainment)	128

Preparing, burning, and mastering

The last stage in creating a DVD Architect™ Pro project is converting your project to a format that you can distribute. You can prepare a project so you can burn it later, prepare and burn your project, or create a DVD master that you can send to a replication facility for mass production.

Preparing your DVD project

Preparing a disc creates the files and directory structure needed by your disc without committing the project to disc.

1. From the File menu, choose Make DVD. The Make DVD wizard is displayed.
2. Click the Prepare button. The Select Prepare Folder page is displayed.
3. In the Prepare folder box, type the path to the folder where you want to prepare your project, or click Browse to choose a folder.



You can only prepare to a folder that is empty or a folder that you have previously prepared to.

4. If you've previously prepared the project, the Smart prepare section of the window will display an estimate of the percentage of the project that has not changed and will be reused.
 - a. Click the Advanced button. The Smart Prepare Options dialog is displayed.
 - b. Clear the Enable smart prepare check box.
 - c. Click the OK button to continue.



Smart prepare technology can drastically reduce project preparation times if you need to edit a portion of your project. When you reprepare your project, only the portions of the project that have changed will be prepared.

5. Click the Next button.

6. The files in your project are analyzed to ensure that they are ready for burning and a message list is displayed with the results. You can also view the final size of your project.

- a. Review the message list and make any necessary adjustments.

Message Type	Description
	Informational Produces a valid disc and does not require any action.
	Warning Produces a valid disc and does not require any action.
	Error Produces an invalid disc and must be resolved.

- b. Click the Optimize button to display the Optimize Disc dialog where you can make changes to individual media file and project settings (often allowing you to resolve warnings or errors). For more information, see "[Optimizing your project](#)" on page 119.
 - c. Click the Next button.
 7. The subtitle and menu highlight mask files in your project are analyzed to ensure that they are ready for burning and a message list is displayed with the results. Review the messages and make any necessary adjustments.
 8. Click the Finish button to begin preparing your project.
 9. The application displays a dialog box indicating that the prepare completed successfully; click the OK button to continue.

Burning your DVD project

From the File menu, choose Make DVD to open the Make DVD dialog, where you can burn current projects, previously prepared projects, or previously mastered projects onto disc.



If you have a display device that is susceptible to burn-in (such as a rear-projection television), do not use static text or bright static graphics in any scene that will be displayed on screen for an extended period of time.

1. From the File menu, choose Make DVD. The Make DVD wizard is displayed.
2. Click the Burn button. The Select Prepare Folder page is displayed.

3. Choose the location where you want to prepare your project or the location of a previously prepared or mastered project that you want to burn:

Option	Description
Current project	Select the Current project radio button and type the path to the folder where you want to prepare your project in the Prepare/burn folder box (or click Browse to choose a folder). If you've previously prepared the project, the Smart prepare section will display the estimated percentage of the project that has not been changed and that can be reused. If you want to turn off smart prepare and prepare the entire project, perform the following steps: a. Click the Advanced button. The Smart Prepare Options dialog is displayed. b. Clear the Enable smart prepare check box. c. Click the OK button to continue.  Smart prepare technology can drastically reduce project preparation times if you need to edit a portion of your project. When you reprepare your project, only the portions of the project that have changed will be prepared.
Previously prepared folder	Select the Previously prepared folder radio button and type the path to the folder that contains a prepared project in the Prepared folder box (or click Browse to choose a folder).
Previously mastered folder	Select the Previously mastered folder radio button to burn a previously mastered project. Type the path to the folder that contains a previously mastered project in the Mastered folder box (or click Browse to choose a folder).

4. Click the Next button.
5. If you selected the Current project radio button in step 3, DVD Architect software displays a list of messages about your project and estimates the project's final size on the Review Message List page.

- a. Review the message list and make any necessary adjustments.

Message Type	Description
	Informational Produces a valid disc and does not require any action.
	Warning Produces a valid disc and does not require any action.
	Error Produces an invalid disc and must be resolved.

- b. Click the Optimize button to display the Optimize Disc dialog where you can make changes to individual media file and project settings (often allowing you to resolve warnings or errors). For more information, see "[Optimizing your project](#)" on page 119.
 - c. Click the Next button.
6. The subtitle and menu highlight mask files in your project are analyzed to ensure that they are ready for burning and a message list is displayed with the results. Review the messages and make any necessary adjustments.
7. Select the burn parameters:
 - a. In the Volume name box, type the name of your disc.
 - b. From the Device drop-down list, choose your DVD/Blu-ray Disc burner or ISO Image Writer.
 - c. Perform one of the following actions:
 - If you chose your DVD burner, choose your burning speed in the Speed drop-down list.
 - If you chose ISO Image Writer, click the Browse button  next to the File name box and browse to the location where you would like to save the file.
 - d. Select the Advanced button to display the Advanced Burn Parameters dialog. The Drive Info tab lists information about the drive to which the DVD will be burned. The Media Info tab lists information about the type of media currently in your DVD burner. The Labels tab has information about the volume name, volume set name, and application ID, which you can adjust, if necessary. Click OK to return to the Select Burn Parameters page.
 - e. If you're using a -RW disc, you can select one of the Erase mode radio buttons to erase the disc before burning.

Option	Description
Do not erase	Does not erase the contents of the disc.
Quick erase	Erases only the table of contents.
Full erase	Erases all data from the disc.

- f. Select the Burn disc radio button if you want to burn your project, or select the Test only button to perform a test burn without activating your burner's laser.



Test burns are not available with single- or dual-layer discs using +R/+RW media or when the Use legacy disc drivers check box is cleared on the Burning tab of the Preferences dialog.

- g. Select the Eject disc when done check box so the DVD drive will open when the burn is completed.

8. Click the Finish button to start burning.

9. When burning a previously mastered folder, after clicking the Finish button, click Continue to burn the next mastered layer.



When burning a dual-layer mastered project, each layer must be burned to separate discs. You cannot burn both layers to one dual-layer disc.

10. If you're preparing and burning a dual-layer disc, the Choose Layer Break Behavior page is displayed to allow you to choose whether you want to choose a layer break or allow the software to choose a break for you.

- a. Choose one of the following options:

Setting	Description
Choose a layer break point automatically	The software will choose a layer break for you.  If the layer break must occur in a compilation, you'll be unable to burn your project. To resolve the situation, try the following: ◦ Reordering titles may allow a suitable layer break to be found. For more information, see "Editing title order" on page 151. ◦ Changing the length of slides in the compilation may allow a suitable layer break to be found. For more information, see "Picture compilations" on page 192.
Prompt me to choose a layer break point only if the break must be placed within a title	After the project is prepared, the software will interrupt the burning process to prompt you to choose a layer break point if a break point cannot be placed at the beginning of a title.
Prompt me to choose the layer break point	After the project is prepared, the software will interrupt the burning process to prompt you to choose a layer break point.

- b. Click the Finish button. DVD Architect software prepares the project.

11. If you're burning a dual-layer disc from an already-prepared project, the Select Layer Break page is displayed to assist you with placing the layer break.



Notes:

- All media after the selected layer break will be placed on the second layer.
 - If you're preparing and burning, the Select Layer Break page will be displayed only if you did not choose the Choose a layer break point automatically radio button in step 10 or if the software is unable to find a preferred layer break point.
- a. At the top of the page, select a setting from the drop-down list to indicate whether you want the preferred layer break points or all available layer break points to be displayed. Break points are determined by chapters in your titles:
 - A preferred layer break point occurs at the beginning of a title. These chapter markers are preferred because they will not result in a visible pause when the DVD or Blu-ray Disc player changes layers.
 - If no preferred layer break points are available, you can choose to display all possible layer break points. If you choose a nonpreferred break point, viewers may notice a pause when the player changes layers.
 - If no layer break points are available, you can close the wizard and add a chapter marker manually. The wizard will suggest a title and approximate location. For more information, see "[Inserting markers](#)" on page 26.
 - If layer break points are not available in suitable locations, try rearranging the titles. By changing the title order, you may be able to achieve that layer break at a more desirable location. For more information, see "[Editing title order](#)" on page 151.
 - b. Select the layer break point you want to use.

12. The application displays a dialog box prompting you to burn another disc.

- Click the Yes button to burn another copy. The application displays the Make DVD - Select Burn Parameters page where you can begin the process again.
- Click the No button if you do not want to burn another copy of your DVD.

Burning 8-cm discs to 12-cm discs

You can burn a camcorder-prepared DVD (8-cm disc) onto a standard DVD (12-cm disc) using DVD Architect. Connect the camcorder via the USB port to the computer and insert a writable DVD into your DVD drive.



To locate the camcorder's USB connection, please review the camcorder's user instructions.

1. From the File menu, choose Make DVD. The Make DVD wizard is displayed.
2. Click the Burn button. The Select Prepare Folder page is displayed.

3. Select the Previously prepared folder radio button and click Browse to choose the USB drive.



The DVD must be finalized in the camcorder before the disc can be copied.

4. Click the Next button.

5. Select the burn parameters:

- a. In the Volume name box, type the name of your disc.
- b. From the Device drop-down list, choose your DVD burner or ISO Image Writer.

If	Then
You chose your DVD burner	In the Speed drop-down list, choose your burning speed.
You chose ISO Image Writer	In the File name box, click the Browse button  to browse to the location where you would like to save the file.

- c. Select the Advanced button to display the Advanced Burn Parameters dialog. The Drive Info tab lists information about the drive to which the DVD will be burned. The Media Info tab lists information about the type of media currently in your DVD burner. The Labels tab has information about the volume name, volume set name, and application ID, which you can adjust, if necessary. Click OK to return to the Select Burn Parameters page.
- d. Select the Burn disc radio button if you want to burn your project, or select the Test only button to perform a test burn without activating your burner's laser.



Test burns are not available when the Use legacy disc drivers check box is cleared on the Burning tab of the Preferences dialog. For more information, see "[Burning Preferences](#)" on page 283.

- e. Select the Eject disc when done box so the DVD drive will open when the burn is completed.
6. Click the Finish button to start burning.
 7. The application displays a dialog box prompting you to burn another disc.
 - Click the Yes button to burn another copy. The application displays the Make DVD - Select Burn Parameters page where you can begin the process again.
 - Click the No button if you do not want to burn another copy of your DVD.

For more information, see "[Burning multiple copies](#)" on page 242.

Writing a DVD master for replication

From the File menu, choose Make DVD to open the Make DVD dialog, where you can create a disc master for disc replication.



This feature is not available for Blu-ray Disc projects.



If you have a display device that is susceptible to burn-in (such as a rear-projection television), do not use static text or bright static graphics in any scene that will be displayed on screen for an extended period of time.

1. From the File menu, choose Make DVD.
2. Click the Write Master button.
3. On the Select Prepare Folder page, choose the location where you want to prepare your project or the location of an already-prepared project that you want to burn.

Option	Description
Current project	Select the Current project radio button and type the path to the folder where you want to prepare your project in the Prepare/burn folder box (or click Browse to choose a folder). If you've previously prepared the project, the Smart prepare section will display the estimated percentage of the project that has not been changed and that can be reused. If you want to turn off smart prepare and prepare the entire project, perform the following steps: a. Click the Advanced button. The Smart Prepare Options dialog is displayed. b. Clear the Enable smart prepare check box. c. Click the OK button to continue.  Smart prepare technology can drastically reduce project preparation times if you need to edit a portion of your project. When you reprepare your project, only the portions of the project that have changed will be prepared.
Previously prepared folder	Select the Previously prepared folder radio button and type the path to the folder that contains a prepared project in the Prepared folder box (or click Browse to choose a folder).

4. Click the Next button.
5. If you selected the Current project radio button in step 3, DVD Architect software displays a list of messages about your project and estimates the project's final size on the Review Message List page.

- a. Review the message list and make any necessary adjustments.

Message Type	Description
	Informational Produces a valid disc and does not require any action.
	Warning Produces a valid disc and does not require any action.
	Error Produces an invalid disc and must be resolved.

- b. Click the Optimize button to display the Optimize Disc dialog where you can make changes to individual media file and project settings (often allowing you to resolve warnings or errors). For more information, see ["Optimizing your project"](#) on page 119.
 - c. Click the Next button.
6. The subtitle and menu highlight mask files in your project are analyzed to ensure that they are ready for burning and a message list is displayed with the results. Review the messages and make any necessary adjustments.
7. On the Update Mastering Properties page, you can choose to update the settings from the Project Properties dialog.
 - a. Click the Copy Protection button at the top of the page and choose your copy protection settings. For more information, see ["Editing copy protection settings"](#) on page 113.
 - b. Click the Regions button at the top of the dialog and choose the region settings for your disc. For more information, see ["Editing region settings"](#) on page 115.

 Region information is not encoded on DVDs you burn with DVD Architect software; the software sets a region flag that is encoded by a replication facility.
 - c. Click the Mastering button at the top of the dialog and choose your mastering settings.
 - d. Click the Next button.
8. On the Select Mastering Output Parameters page, choose your mastering settings:
 - a. In the Volume name box, type the name of your disc.
 - b. From the Device drop-down list, choose your hard drive or your DLT (digital linear tape) drive.
 - c. If you're saving your master to a file on disk, type the path to the folder you want to use, or click the Browse button to choose a folder.
 - d. If you selected your DLT drive from the Device drop-down list and need to erase the tape, select the Erase first, then write to tape check box. A dialog box confirming that you want to erase the tape is displayed; click the Yes or No button to continue.

 Erasing the tape may take a long time and oftentimes cannot be canceled.
 - e. Click the Next button.
9. Select your burning settings:

- a. Type the name of your disc in the Volume name box.
 - b. From the Device drop-down list, choose your hard drive or DLT (digital linear tape) drive.
 - c. If you're saving your master to a file on disk, type the path to the folder you want to use, or click the Browse button to choose a folder.
 - d. If you're saving your master to a DLT, select the Erase first, then write to tape check box if you want to erase the tape. This process can take up to two hours.
 - e. Click the Next button.
10. If you're preparing and mastering a dual-layer disc, the Choose Layer Break Behavior page is displayed to allow you to choose whether you want to choose a layer break or allow the software to choose a break for you.

- a. Select one of the following options:

Setting	Description
Choose a layer break point automatically	The software will choose a layer break for you.
Prompt me to choose a layer break point only if the break must be placed within a title	After the project is prepared, the software will interrupt the mastering process to prompt you to choose a layer break point if a break point cannot be placed at the beginning of a title.
Prompt me to choose the layer break point	After the project is prepared, the software will interrupt the mastering process to prompt you to choose a layer break point.

- b. Click the Finish button. DVD Architect software prepares the project.
11. If you're mastering a dual-layer disc from an already-prepared project, the Select Layer Break page is displayed to assist you with where to place the layer break. All media after the selected layer break will be placed on the second layer.



If you're preparing and mastering, the Select Layer Break page will be displayed only if you did not choose the Choose a layer break point automatically radio button in step 12 or if the software is unable to find a preferred layer break point.

- a. At the top of the page, select a setting from the drop-down list to indicate whether you want the preferred layer break points or all available layer break points to be displayed. Break points are determined by chapters in your titles:
 - A preferred layer break point occurs at the beginning of a title. These chapter markers are preferred because they will not result in a visible pause when the DVD player changes layers.

- If no preferred layer break points are available, you can choose to display all possible layer break points. If you choose a nonpreferred break point, viewers may notice a pause when the player changes layers.
 - If no layer break points are available, you can close the wizard and [add a chapter marker](#) manually. The wizard will suggest a title and approximate location.
 - If layer break points are not available in suitable locations, try rearranging the titles in the [Project Overview window](#). By changing the title order, you may be able to achieve that layer break at a more desirable location.
 - b. Select the layer break point you want to use.
12. Click the Finish button to start preparing your project (if necessary) and writing your mastering files.
 13. The application displays a dialog box indicating that the mastering completed successfully; click the OK button to continue.

Preparing your Blu-ray Disc project

Preparing a disc creates the files and directory structure needed by your disc without committing the project to disc.

1. From the File menu, choose Make Blu-ray Disc. The Make Blu-ray Disc wizard is displayed.
2. Click the Prepare button. The Select Image page is displayed.
3. In the Prepare image box, type the path to the image file (.iso) where you want to prepare your project, or click Browse to choose a location.
4. Click the Next button.
5. The files in your project are analyzed to ensure that they are ready for burning and a message list is displayed with the results. You can also view the final size of your project.
 - a. Review the message list and make any necessary adjustments.

Message Type	Description	
	Informational	Produces a valid disc and does not require any action.
	Warning	Produces a valid disc and does not require any action.
	Error	Produces an invalid disc and must be resolved.

- b. Click the Optimize button to display the Optimize Disc dialog where you can make changes to individual media file and project settings (often allowing you to resolve warnings or errors). For more information, see "[Optimizing your project](#)" on page 119.
6. Click the Finish button. Your project is prepared as an image file (.iso) in the folder you specified.
7. The application displays a dialog box indicating that the prepare completed successfully; click the OK button to continue.

Burning your Blu-ray Disc project

From the File menu, choose Make Blu-ray Disc to open the Make Blu-ray Disc dialog, where you can burn current projects or previously prepared projects to disc.



If you have a display device that is susceptible to burn-in (such as a rear-projection television), do not use static text or bright static graphics in any scene that will be displayed on screen for an extended period of time.

1. From the File menu, choose Make Blu-ray Disc. The Make Blu-ray Disc wizard is displayed.
2. Click the Burn button. The Select Image page is displayed.
3. Choose the location where you want to prepare your image or the location of a previously prepared image that you want to burn:

Option	Description
Current project	Select the Current project radio button and type the path to the folder where you want to prepare your project in the Prepare/burn folder box (or click Browse to choose a folder).
Previously prepared image	Select the Previously prepared image radio button and type the path to the folder that contains a prepared image in the Prepared image box (or click Browse to choose a folder).

4. Click the Next button.
5. If you selected the Current project radio button in step 3, DVD Architect software displays a list of messages about your project and estimates the project's final size on the Review Message List page.

- a. Review the message list and make any necessary adjustments.

Message Type	Description
 Informational	Produces a valid disc and does not require any action.
 Warning	Produces a valid disc and does not require any action.
 Error	Produces an invalid disc and must be resolved.

- b. Click the Optimize button to display the Optimize Disc dialog where you can make changes to individual media file and project settings (often allowing you to resolve warnings or errors). For more information, see "[Optimizing your project](#)" on page 119.
 - c. Click the Next button.
6. Select the burn parameters:
 - a. In the Volume name box, type the name of your disc.
 - b. From the Device drop-down list, choose your Blu-ray Disc burner.
 - c. From the Speed drop-down list, choose your burning speed.

- d. Select the Advanced button to display the Advanced Burn Parameters dialog. The Drive Info tab lists information about the drive to which the disc will be burned. The Media Info tab lists information about the type of media currently in your burner. Click OK to return to the Select Burn Parameters page.
- e. If you're using a -RE disc, you can select one of the Erase mode radio buttons to erase the disc before burning.

Option	Description
Do not erase	Does not erase the contents of the disc.
Quick erase	Erases only the table of contents.
Full erase	Erases all data from the disc.

- f. Select the Burn disc radio button if you want to burn your project, or select the Test only button to perform a test burn without activating your burner's laser.



Test burns are not available when using BD-RE media or when the Use legacy disc drivers check box is cleared on the [Burning tab](#) of the Preferences dialog.

- g. Select the Eject disc when done check box so the Blu-ray Disc drive will open when the burn is completed.
7. Click the Finish button to start burning.
 8. When burning a previously prepared dual-layer image, after clicking the Finish button, click Continue to burn the next layer. The layer break is selected automatically.
 9. The application displays a dialog box prompting you to burn another disc.
 10. Click the Yes button to burn another copy. The application displays the Make Blu-ray Disc - Select Burn Parameters page where you can begin the process again.
 11. Click the No button if you do not want to burn another copy of your project.

Burning multiple copies

If you want to burn multiple copies of your project, the application will prompt you to burn another copy after each disc has completed burning.

Click the Yes button to burn another copy. The application displays the Make DVD - Select Burn Parameters page where you can begin the process again.

Click the No button if you do not want to burn another copy of your project.

Erasing a disc

From the File menu, choose Erase Disc to delete data from a rewritable disc.

1. From the File menu, choose Erase Disc. The Erase Disc dialog is displayed.
2. From the Drive drop-down list, choose the drive that contains the disc you want to erase.

3. Choose the speed of the drive from the Speed drop-down list.

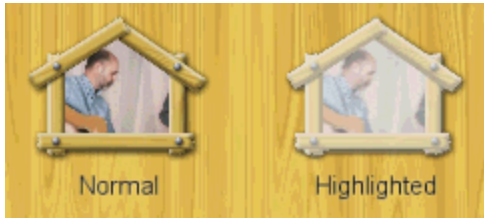


The Speed drop-down list is not available if you cleared the Use legacy disc drivers check box on the Burning tab of the Preferences dialog. For more information, see "[Burning Preferences](#)" on page 283.

4. Choose an erase mode:
 - Choose the Quick radio button to erase only the disc's table of contents.
 - Choose the Full radio button to erase all data from the disc.
5. Click the OK button to start erasing.

Creating Custom Masks

A mask determines which portion of an image will be visible. You can apply masks to button thumbnails, button frames, and image highlights. Consider the following example:



This menu page contains two copies of the same button so you can see the button's normal and highlighted states. Three masks were used to create this button:

- A thumbnail mask is applied so only the portion of the image within the wooden frame is visible.
- A frame mask is applied so the user can see through the frame to the menu background and the button thumbnail.
- A highlight mask (identical to the frame mask) is applied so the wooden frame and the thumbnail within the frame are highlighted when the button is selected.



Thumbnail Thumbnail Mask Frame Frame/Highlight Mask

DVD Architect software uses the color value of the red channel to determine which portions of an image are visible: white (Red=255, Green=255, Blue=255) represents the portions of the thumbnail (or frame) that will be visible, and black (Red=0, Green=0, Blue=0) represents the portions that will be masked out, allowing the menu background to show through. Gray areas are partially visible.

Thumbnail masks

A thumbnail mask limits the portion of a thumbnail image that will be visible under a button. [Themes](#) can apply thumbnail masks automatically, or you can create your own.

When you select a button in the workspace, the Properties window displays information about the selected button. To see information about the thumbnail image and its mask, click the Media button at the top of the [Button Properties](#) pane and look under the Thumbnail Properties heading.

- The Thumbnail Media box displays the path to the current thumbnail file.
- The Mask box displays the path to the current mask file.



If you're using layered PSD files, you can choose which layer you want to use as the thumbnail or mask image. Click the  button to expand the Thumbnail Media or Mask heading, and choose the layer you want to use from the Layer drop-down list (or choose Compositing layer to use the mixed layers).

In the following example, the white portion of the mask image represents the portion of the thumbnail image that will be visible in the menu.



You can create your own masks using your image-editing software of choice. Create the mask as an image the same size as your thumbnail image (or as a layer in the thumbnail image). The masked area can be any shape, so don't be afraid to get creative. You can use any supported media file format as a mask.

 You can use gradients to feather the edges of a masked image.

 When an image that does not support transparency (such as BMP or JPG) is used as a mask, any pixel with a red value of 255 is transparent in the mask. In this example, the white area represents the portion of the thumbnail that will be visible.

 When an image that supports transparency (such as PNG or PSD) is used as a mask, transparent portions of the mask image represent portions of the thumbnail image that will be visible.

Frame masks

A frame mask limits the portion of a thumbnail frame image that will be visible around a button.

[Themes](#) can apply frame masks automatically, or you can create your own.

When you select a button in the workspace, the Properties window displays information about the selected button. To see information about the thumbnail image and its mask, click the Media button at the top of the [Button Properties](#) pane and look under the Frame Properties heading.

- The Frame Media box displays the path to the current frame file.
- The Mask box displays the path to the current mask file.

 If you're using layered PSD files, you can choose which layer you want to use as the frame or mask image. Click the  button to expand the Frame Media or Mask heading, and choose the layer you want to use from the Layer drop-down list (or choose Composited layer to use the mixed layers).

In the following example, the white portion of the thumbnail mask image represents the portion of the frame that will be visible in the menu. The black and gray portions represent sections where the menu background and underlying thumbnail will show through.



You can create your own masks using your image-editing software of choice. Create the mask as an image the same size as your frame image (or as a layer in the frame image). The masked area can be any shape, so don't be afraid to get creative. You can use any supported media file format as a mask.

💡 You can use gradients to feather the edges of a masked image.



—or—



When an image that does not support transparency (such as BMP or JPG) is used as a mask, any pixel with a red value of 255 is transparent in the mask. In these examples, the white and red areas represent the portion of the frame that will be visible.



When an image that supports transparency (such as PNG or PSD) is used as a mask, transparent portions of the mask image represent portions of the frame that will be visible.

Highlight masks

A highlight mask determines where highlighting will be applied when a button is selected, activated, or inactive. A highlight mask can be applied in two different ways:

- Per button: Select a button and click the Highlight button at the top of the [Button Properties](#) pane. Use the Style drop-down list to choose a predefined highlighting style, or choose Custom to use a custom mask file.

Creating a button highlight mask is just like creating a frame mask. See the *Frame masks* heading above for more information.

- Per menu: If you're [designing your menus](#) in a graphics program, you can adapt your menu background files to create a mask file that you can apply to the menu. Select a menu in the workspace and click the Background Media button at the top of the Menu Page Properties pane. Use the Highlight mask control to choose the mask file you want to use, and use the Highlight mask mapping control to indicate how transparency is determined from the mask.

The following steps will guide you through the process of creating a menu highlight mask.

1. If you designed your menu as described in [this](#) help topic, you'll have a menu background image file that looks similar to the following image:



2. Using the menu background image, create a new layer or file for your highlight mask. In the following example, black sections indicate the areas we want to highlight:



3. Apply the mask to your menu:
 - a. Double-click a menu in the [Project Overview](#) window (or navigate in the workspace) to open the menu you want to edit.
 - b. Click the Background Media button at the top of the [Menu Page Properties](#) pane.
 - c. Select the Highlight mask box, click the  button, and then choose Replace from the menu.
 - d. Browse to the file you want to use.
 - e. If the mask is contained in a layer in the mask file, click the  button next to the Mask box to expand the controls and choose a layer from the Layer drop-down list.

4. Choose a setting from the Highlight mask mapping control to indicate how transparency is determined from the mask. For the sample mask image we created in step 2, we'll use the Transparency setting.

The mapping mode you use depends on your specific highlight mask image:

Mapping Mode	Description
Transparency	Maps the alpha channel of the menu highlight mask to the four colors used in the color set selected in the Selected button colors, Activated button colors, or Inactive button colors drop-down list on the General page of the Menu Page Properties pane. The most opaque pixels (those with alpha values of 192 to 255) are mapped to the color set's fill color (color 1), and the most transparent pixels (those with alpha values of 0 to 63) are mapped to the color set's transparent color (color 4).
Intensity	Maps the average pixel intensity of the menu highlight mask to the four colors used in the color set selected in the Selected button colors, Activated button colors, or Inactive button colors drop-down list. The lightest pixels (those with an average intensity of 192 to 255) are mapped to the color set's fill color (color 1), and the darkest pixels (those with an average intensity of 0 to 63) are mapped to the color set's transparent color (color 4).
Color Channel	Maps color channels in the menu highlight mask to the four colors used in the color set selected in the Selected button colors, Activated button colors, or Inactive button colors drop-down list. A pixel containing any red channel component uses the color set's fill color (color 1), a pixel containing any green channel component uses the color set's anti-alias color (color 2), a pixel containing any blue component uses the color set's outline/background color (color 3), and a completely black pixel uses the color set's transparent color (color 4).

5. Choose the [color sets](#) you want to use to highlight buttons on the menu when they are selected and activated:

- a. Click the General button at the top of the Menu Page Properties pane.
 - b. Choose a setting from the Selected button colors drop-down list to choose the color set that will be used to highlight buttons on the menu when they are selected using the arrow buttons on the remote control.
 - c. Choose a setting from the Activated button colors drop-down list to choose the color set that will be used to highlight the selected when the user presses the Enter button on the remote control.
 - d. Choose a setting from the Inactive button colors drop-down list to choose the color set that will be used to highlight unselected buttons in the menu.
6. Verify that your buttons do not have their own highlight mask settings:
- a. Select all the buttons in the workspace (hold Ctrl or Shift while clicking to select multiple objects).
 - b. Click the Highlight button at the top of the Button Properties pane.
 - c. Choose Custom from the Style drop-down list.
 - d. Choose None from the Mask drop-down list.

The menu background and highlight mask combine to produce the following result when the button on the right is selected:



Creating Custom Menus and Buttons Using Layered PSD Graphics

For the ultimate in control over the appearance of your menus, you can create custom menus using your favorite graphics application and [import the .psd file as a menu](#).

To create a menu with background media, thumbnails, and masks in a layered .psd file, use the procedures described in this help topic.

This topic assumes an understanding of how masks are used in DVD Architect software. For more information, click [here](#).

Layer naming requirements

DVD Architect software will determine which layers will be used for each part of a menu based on the layer name in your .psd file using the following format: Type-ID-Subtype-Name



Layer names cannot contain spaces.

Layer	Description
Type	Indicates the contents of the layer: ■ background - Used for menu background images and menu highlight masks. ■ button - Used for button images and masks.
ID	A numeric identifier that is used to represent related items. For example, the layers used to create button 1 in your menu would be named as follows: button-01-thumbnail button-01-thumbnailmask button-01-frame The button ID also determines a menu's button order: button-01 will be the first button, button-02 will be the second button, and so on.

Layer	Description
Subtype	Indicates the type of image contained in the layer. ■ thumbnail - A layer containing a thumbnail image for a menu or button. Can be abbreviated tmb. ■ thumbnailmask - A layer containing a button's thumbnail mask. Can be abbreviated tmbmsk. ■ highlight - A layer containing a highlight mask for a menu background or button. Can be abbreviated hlt. By default, a highlight layer uses color channel mapping to determine transparency. If you want to specify the mapping mode, use the following subtypes: highlightrgb, highlightintensity (can be abbreviated highlightint), or highlighttransparency (can be abbreviated highlighttrans or hltrans). ■ frame - A layer containing a button frame. Can be abbreviated frm. ■ framemask - Can be abbreviated frmmsk.
Name	An optional label for an object. Use Up, Back, Prev, and Next to identify layers that are used to create navigation buttons.

For example, a layer named button-04-highlightintensity-back would be used to define the highlight mask for the fourth button on a menu. Transparency is determined using intensity mapping, and the button will be imported as the Back button.

Creating a layered .psd menu

The following procedure will demonstrate how to create this menu using a layered .psd file that contains the menu background, buttons, and related mask images on separate layers.



 In general, try to avoid making major changes (such as adding, removing, or renaming layers) after you've created a menu using a .psd file. If you edit and save a menu's .psd file while working with your DVD Architect project, DVD Architect software will release the file when it loses focus and reload the .psd when focus is restored to the DVD Architect window. Depending on the changes you make to the .psd file, the following will occur:

- If you change the contents of a layer, the corresponding object's image will be updated when you restore focus to the DVD Architect window.
- If you add a layer with an invalid name, the layer is ignored.

- If you add a layer, the layer is not detected until you choose Reapply Layout from File from the Edit menu.
- If you remove a layer, the corresponding object's image will be removed.
- If you rename a layer to an invalid name, the corresponding object's image will be removed.
- If you rename a layer to a valid name, the object corresponding to the previous layer name will be taken offline. The object associated with the new layer name is added when you choose Reapply Layout from File from the Edit menu.

1. In your image-editing application, start a new image.

Your image size should match the height of the output format frame size, and the width should include compensation for the output format's pixel aspect ratio:

Output Format	Aspect Ratio	Menu Size
4:3 NTSC (720x480)	.9091	655x480
Widescreen NTSC (720x480)	1.2121	873x480
4:3 PAL (720x576)	1.0926	787x576
Widescreen PAL (720x576)	1.4568	1049x576
1280x720	1.0	1280x720
1440x1080	1.3333	1920x1080
1920x1080	1.0	1920x1080

2. Create layers for your menu background images:

- Create a layer set named background-01-group (optional).
- Create a layer named background-01 for the menu background. Static titles, images, and other background elements should be merged into this layer.



The woodgrain background and text were originally created on separate layers, but they were merged into a single layer.

- Create a layer named background-01-highlight for the menu's highlight mask (optional).



The red areas represent portions of the menu where highlighting will be applied.

If your .psd file will use button-specific highlight mask images, you can omit this layer.

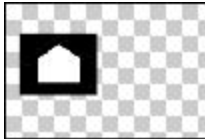
3. Create layers for your button images. In the sample menu, the house-shaped button on the left is button-01.
 - a. Create a layer set named button-01-group (optional).
 - b. Create a layer named button-01-thumbnail for the main button image (optional).



The simple magenta field represents the button's thumbnail image.

You can omit this layer if you plan to use the Media page in the [Button Properties](#) pane to assign a thumbnail. For example, you could use this method to use a title's video as an animated or still thumbnail.

- c. Create a layer named button-01-thumbnailmask for the button's [mask](#) image (optional). The mask determines which part of the thumbnail will be visible inside the button.



The white area represents the portion of the thumbnail that will be visible in the button. The black area sets the size of the button and represents the portion of the thumbnail that is masked to allow the menu background to show through.

- d. Create a layer named button-01-frame for the button's frame image (optional). The frame image is displayed around the button.



The button frame is a wood-textured pentagon that was created using several layers that were merged to a single layer.

- e. Create a layer named button-01-framemask for the frame's mask image (optional). The frame mask determines which portion of the frame image will be visible.



The white area represents the portion of the frame that will be visible. The black area matches the size of the button (established in step C above) and represents the portion of the button that is masked to allow the menu background to show through.

- f. Create a layer named button-01-highlight for the button's highlight mask (optional). The highlight mask determines where highlighting will be applied when a button is selected or activated.



The button-01-framemask layer was duplicated and renamed to allow highlighting to be applied to the visible frame.

The white area represents the portion of the button that will be highlighted when the button is selected or activated. The gray area in the center will be partially highlighted.

If your .psd file will use a menu-specific highlight mask, you can omit this layer.

4. Repeat step 3 as needed, incrementing the ID for each button. In the sample menu, the house-shaped button on the right is button-02.
5. Create layers for navigation buttons as needed. In the sample menu, the arrow-shaped button in the bottom-right corner is button-03-group.



If you omit navigation button layers, empty buttons will be used.

- a. Create a layer set named button-03-group (optional).
- b. Create a layer named button-03-thumbail-next for the main button image (optional).

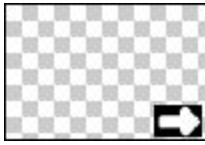
Appending "next" to the end of the layer name tells DVD Architect software that this layer is used for a next navigation button. Your menu could also include button-03-thumbail-up, button-03-thumbail-back, or button-03-thumbail-prev.



The button is a wood-textured arrow that was created using several layers that were merged to a single layer.

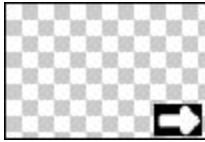
You can omit this layer if you plan to use the Media page in the [Button Properties](#) pane to assign a thumbnail. For example, you could use this method to use a title's video as an animated or still thumbnail.

- c. Create a layer named button-03-thumbnaillmask-next for the button's [mask](#) image (optional). The mask determines which part of the thumbnail will be visible inside the button.



The white area represents the portion of the thumbnail that will be visible in the button. The black area sets the size of the button and represents the portion of the thumbnail that is masked to allow the menu background to show through.

- d. Create a layer named button-03-highlight-next for the button's highlight mask. The highlight mask determines where highlighting will be applied when a button is selected or activated.



The button-03-thumbnaillmask-next layer was duplicated and renamed to restrict highlighting to the arrow.

The white area represents the portion of the button that will be highlighted when the button is selected or activated.

If your .psd file will use a menu-specific highlight mask, you can omit this layer.

Creating Custom Menus and Buttons Using Single-Layer Graphics

For the ultimate in control over the appearance of your menus, you can create custom menus using your favorite graphics application.

If the application does not support layers, use the following procedure.

1. Use your image-editing software to create your menu:
2. Your image size should match the height of the output format frame size, and the width should include compensation for the output format's pixel aspect ratio:

Output Format	Aspect Ratio	Menu Size
4:3 NTSC (720x480)	.9091	655x480
Widescreen NTSC (720x480)	1.2121	873x480
4:3 PAL (720x576)	1.0926	787x576
Widescreen PAL (720x576)	1.4568	1049x576
1280x720	1.0	1280x720
1440x1080	1.3333	1920x1080
1920x1080	1.0	1920x1080

3. Include the background, buttons, and any text you want to display in a single layer.

When you're finished, you'll have an image that looks similar to the following:



4. Create a highlight mask image to determine where highlighting will be applied when a button is selected or activated. For more information about creating and using highlight masks, see the *Highlight masks* heading in the [Creating Custom Masks](#) help topic.
5. [Add](#) a menu to your project.
6. Remove the default text from the menu.
7. Add your background image:

- a. Click the Background Media button at the top of the [Menu Page Properties](#) window.
 - b. Select the Video control, click the  button, and choose Replace to browse to your custom background image.
 - c. Click the General button at the top of the Menu Page Properties pane, select the Background media control, and then choose Stretch to Fit.
8. Add buttons to the menu:
 - a. From the Insert menu, choose Empty Button.
 - b. Select the sizing tool , click the new button's default text label, and press Delete.
 - c. Using the sizing tool, drag the empty button rectangle and drop it over a button image in your menu background.
 - d. Drag the edges of the empty button with the sizing tool (or use the controls on the Transformations pane of the [Button Properties](#) pane) to resize the empty button so the entire button image is contained within the empty button's rectangle.

 If the button image extends beyond the empty button rectangle, button highlighting will be applied only to the portion of the button within the rectangle.
 - e. Click the Action button at the top of the Button Properties window and choose a menu or title from the Destination drop-down to set the button's target.

 If the title you want to use as a destination isn't part of your project yet, you can drag a media file from the Explorer window to the root of the [Project Overview window](#) to add it to your project without creating a button in the current menu.
9. Repeat step 6 for each menu button.
10. Remove the default button highlighting:
 - a. Select all the buttons in the workspace (hold Ctrl or Shift while clicking to select multiple objects).
 - b. Click the Highlight button at the top of the Button Properties pane.
 - c. Choose Custom from the Style drop-down list.
 - d. Choose None from the Mask drop-down list.
11. Apply your menu highlight mask:
 - a. Click the Background Media button at the top of the [Menu Page Properties](#) pane.
 - b. Select the Highlight mask box, click the  button, and then choose Replace from the menu.
 - c. Browse to the file you want to use.

- d. Choose a setting from the Highlight mask mapping control to indicate how transparency is determined from the mask.

For more information about the available settings, please see the *General* heading in the [Menu Page Properties](#) help topic.

12. Choose the [color sets](#) you want to use to highlight buttons on the menu when they are selected, activated, or inactive:
 - a. Click the General button at the top of the Menu Page Properties pane.
 - b. Choose a setting from the Selected button colors drop-down list to choose the color set that will be used to highlight buttons on the menu when they are selected using the arrow buttons on the player remote control.
 - c. Choose a setting from the Activated button colors drop-down list to choose the color set that will be used to highlight the selected when the user presses the Enter button on the player remote control.
 - d. Choose a setting from the Inactive button colors drop-down list to choose the color set that will be used to highlight unselected buttons in the menu.

The Themes window

From the View menu, choose Themes to show or hide the Themes window.

Themes take the guesswork out of creating your project. By choosing a theme, you can quickly create a snazzy new DVD or Blu-ray Disc menu using predefined images and background music.

 Applying positional themes behaves slightly differently from applying grid-based themes. For more information about the differences between these types of themes, "[Exporting a Menu as a Theme](#)" on page 261.

Applying a theme

1. Choose the menu you want to edit:
 - Double-click a menu in the Project Overview window.
 - Click the down arrow in the address bar to select a menu.
2. Click the Back to Parent , Previous Page , and Next Page  buttons in the workspace to navigate your menus.
3. Select the Themes tab.
4. Double-click a theme to apply it to the selected menu or click the Apply Theme button .

 Select the Double-clicking themes applies them to all pages of a menu check box on the General tab of the Preferences dialog if you want to apply a theme to all pages in a menu. When the check box is cleared, the theme is applied to the current page only. For more information, see "[General Preferences](#)" on page 276.

Applying a theme's alignment to menu objects

You can automatically align menu objects when adding media to a menu.

Select the Double-clicking files in Explorer window reapplies theme layout check box on the General tab of the Preferences dialog if you want to automatically realign objects according to the current theme when you double-click media files in the Explorer. When you double-click a file, the new file is added, and the objects are realigned on the menu.

When the check box is cleared, the media files are added to the menu and existing object positions are preserved.

For more information, see "[General Preferences](#)" on page 276.

From the Edit menu, choose Reapply Theme Layout to realign objects at any time.

Deleting a theme

1. Select the Themes tab.
2. Select a theme in the Themes window.
3. Click the Delete Theme button .



You cannot delete the default DVD Architect themes or themes that are currently in use in your project.

Creating Custom Themes

If you're comfortable editing XML, you can create your own custom themes to use with your DVD Architect projects.

Themes are installed to a folder at C:\Documents and Settings\Your Username\Application Data\Vegas\DVD Architect\5.2\Themes (C:\Users\Your Username\AppData\Roaming\Vegas\DVD Architect\5.2\Themes in Windows Vista). Each theme is saved as a .thm file, which is essentially a .zip file that contains the theme's XML file and media.



In previous versions of DVD Architect, themes were installed in a subfolder below the program folder. However, not all users could access the Program Files folder and the theme information. With the current folder location, if two or more people are using DVD Architect from the same computer, the theme information will be duplicated.

The easiest way to create your own themes is to work on a copy of an existing theme.

1. Create a copy of the theme you want to modify and rename the file.
2. Open the .thm file in a program such as WinZip and extract the files to a working folder.
3. Edit the theme's files as necessary:
 - You must change the <NAME> field in the <THEME INFORMATION> section to a unique name for DVD Architect software to recognize the theme.
 - Change the <AUTHOR>, <COPYRIGHT>, and <ABOUT> tags with your own information.
 - The default.xml file contains all information about the layout, including button positioning/spacing, font, text, graphics, and audio information. Do not rename this file.
 - The media files in the theme are used for button and menu graphics, backgrounds, and audio. You can use any file format that DVD Architect software supports, including .bmp, .png, .jpg, .gif, .avi, and .wav.
4. Resave the .zip file, renaming it to a .thm file, in the themes subfolder below the DVD Architect program folder. The program will detect the new theme the next time it starts.



If there are any mistakes or missing files referenced in the default.xml file, the theme will not load.

Exporting a Menu as a Theme

From the File menu, choose Export Menu as Theme to save the current menu as a theme.

Exporting a menu as a theme automates the process of [creating custom themes](#): the exporting process creates the necessary XML and .thm files without bogging you down with the details.



Only buttons from grid-based themes will be displayed in the [Buttons window](#).

Learning more about positional and grid-based themes

When you export a menu as a theme using the simple view, the theme is exported as a positional theme. If you click the Advanced button, you can choose to export a grid-based theme, which gives you more control over the elements in the theme.

Positional theme	Grid-based theme	Feature
✓	✓	Stores the menu title (including text, color, position, size, and text properties).
✓	✓	Stores menu length.
✓	✓	Stores menu loop point.
✓	✓	Stores color set information for selected, activated, and inactive buttons.
✓	✓	Stores reduce interlace flicker setting.
✓		Stores text and graphics with the menu.
✓	✓	Stores information about effects (cropping, brightness, contrast, and colorization) for each saved graphical element.
✓	✓	Stores button information, including size, position, thumbnail and mask media, button text, button text properties, and image/text layout for each button.
	✓	Stores grid layout information: button placement area, horizontal and vertical alignment, and placement for next, previous, and back buttons.
	✓	Stores menu background audio and video, highlight mask images, and highlight mask settings.

Applying a positional theme

When you apply a positional theme, items on the menu are displayed exactly as defined in the theme.

Applying a positional theme type will operate differently if buttons currently exist on the menu where the theme is being applied:

- If no buttons exist, all buttons from the theme are added, sized, and positioned as defined in the theme.

- If one or more buttons exist, the buttons are updated based on their matches in the theme. However, if there are more buttons on the menu than the number defined in the theme, then the extra buttons on the menu will not change.

Text and graphical elements will be updated based on the theme:

- If more text or graphical elements exist on the menu than are defined in the theme, extra elements will not be updated.
- If fewer text or graphical elements exist on the menu than are defined in the theme, extra elements will be added.

Applying a grid-based theme

When you apply a grid-based theme, existing buttons on the menu are moved and resized to display in columns and rows. No buttons are added or deleted.

If the theme does not define a background video, any existing background video will not be modified when you apply the theme.

Exporting a menu as a positional theme

1. Double-click a menu in the [Project Overview](#) window (or navigate in the workspace) to open the menu you want to use to create your theme.
2. From the File menu, choose Export Menu as Theme. The Export Menu as Theme dialog is displayed.



You can also right-click a menu in the workspace and choose Export Menu as Theme from the shortcut menu.

3. In the Name box, type a name to identify the theme. This is the name that will be displayed in the [Themes](#) window, and it is limited to 16 characters.
4. Click the Save button to add your new theme to the Themes window.

Exporting a menu as a grid-based theme

1. Double-click a menu in the [Project Overview](#) window (or navigate in the workspace) to open the menu you want to use to create your theme.
2. From the File menu, choose Export Menu as Theme. The Export Menu as Theme dialog is displayed.



You can also right-click a menu in the workspace and choose Export Menu as Theme from the shortcut menu.

3. In the Name box, type a name to identify the theme. This is the name that will be displayed in the Themes window, and it is limited to 16 characters.
4. Click the Advanced button.
5. Select the Theme type box and choose Grid from the menu.

6. Edit your grid layout properties. The button grid determines where buttons (excluding [navigation](#) buttons) will be arranged.



If you want to view changes in the workspace as you edit the theme's properties, select the Preview changes check box.

Item	Description												
Orientation	Select the box, click the  button, and choose Horizontal or Vertical to indicate how you want to arrange buttons within the grid. Horizontal orientation: <table><tr><td>Button One</td><td>Button Two</td><td>Button Three</td></tr><tr><td>Button Four</td><td>Button Five</td><td>Button Six</td></tr></table> Vertical orientation: <table><tr><td>Button One</td><td>Button Three</td><td>Button Five</td></tr><tr><td>Button Two</td><td>Button Four</td><td>Button Six</td></tr></table>	Button One	Button Two	Button Three	Button Four	Button Five	Button Six	Button One	Button Three	Button Five	Button Two	Button Four	Button Six
Button One	Button Two	Button Three											
Button Four	Button Five	Button Six											
Button One	Button Three	Button Five											
Button Two	Button Four	Button Six											
Horizontal alignment	Select the box, click the  button, and choose a setting to indicate whether you want to align the buttons to the left edge, right edge, or center of the cells in the grid.												
Vertical alignment	Select the box, click the  button, and choose a setting to indicate whether you want to align the buttons to the top, center, or bottom of the cells in the grid.												
Margin	Select the Left, Right, Top, or Bottom box and type a value in the box (or click the  button to display a slider) to set the margins of the grid.												
Item Spacing	Select the Horizontal or Vertical box and type a value in the box (or click the  button to display a slider) to set the margins within the menu that will be used for button placement. The spacing establishes the number of columns and rows in the grid; decrease the spacing to add rows or columns, or increase the spacing to reduce the number of rows and columns.												
Item Button	Click the  button to expand the controls and edit the button properties as needed.												
Next Button													
Previous Button													
Up Button													

Item	Description
Button rectangle	Sets the size of each button rectangle (the rectangle that surrounds the button image and text when you select it in the workspace with the selection tool . Click the  button to expand the controls. Select the Left, Right, Top, or Bottom box and type a value in the box (or click the  button to display a slider) to set the positions of the four sides of the button rectangles.
Image rectangle	Sets the size of each button's image rectangle (the rectangle that surrounds the button image when you select it in the workspace with the sizing tool . Click the  button to expand the controls. Select the Left, Right, Top, or Bottom box and type a value in the box (or click the  button to display a slider) to set the positions of the four sides of the button image rectangles.
Text rectangle	Sets the size and position of each button's text rectangle (the rectangle that surrounds the button's text when you select it in the workspace with the sizing tool . Click the  button to expand the controls. Select the Left, Right, Top, or Bottom box and type a value in the box (or click the  button to display a slider) to set the positions of the four sides of the text rectangles.
Button style	Select the box, click the  button, and choose a command from the drop-down list to determine how the button is displayed on your menu: ■ Text only - The button is displayed as a text-only link. ■ Image only - The button is displayed as a graphical button only. ■ Text and image - The button is displayed as a graphical button with a text label

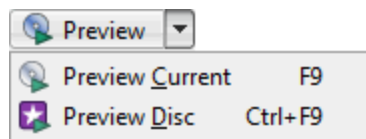
- Click the Save button to add your new theme to the [Themes](#) window.

Previewing Your Project

To ensure that your project looks just the way you intended it, you can preview your DVD Architect™ Pro project on a simulated television screen with a virtual remote control.

 You can specify whether to preview your project in standard (4:3) or widescreen (16:9) format by default. From the Options menu, choose Preferences, and select the Preview tab. Choose the desired setting from the Aspect Ratio drop-down list.

1. Click the down arrow next to the Preview button to choose a preview mode:



- Choose Preview Current to begin the preview with the current page.
- Choose Preview Disc to begin the preview at the beginning of your disc.

2. Use the remote (or click the menu buttons in the preview frame) to navigate and play your project.

 To change the playback quality, click the Preview Quality button and choose a setting from the drop-down list. Decreasing the preview quality can allow you to preview your project when your computer cannot render the project in real time.

3. If you are using a [script](#) in your project and would like to test the script during your preview, click the DVD Script Debugger button  to display the Script Debugger pane at the bottom of the preview window. For more information on testing scripts, click [here](#).

 This button is unavailable for Blu-ray Disc projects.

4. Click the Stretch Preview to Window button  if you want the preview to fill the window.
5. Click the View Safe Areas button  if you want to display borders to represent the visible areas for action and titles. The outer border marks the area that will be visible on a television screen, and the inner border is the suggested area for titles.

 You can adjust the safe area display using the Action safe area and Title safe area settings on the [Editing](#) tab in the Preferences dialog.

6. Click the Preview on External Monitor button  to send your project to the [external monitor](#) or [secondary window display](#) device specified on the [Video Device](#) tab of the Preferences dialog.



External monitor and secondary window display outputs are for verifying colors, menu layout, and [safe areas](#) only and are not an indication of playback synchronization of the final burned disc.

7. If your project has multiple audio, video, or subtitle tracks, you can click the Audio, Angle, or Subtitle buttons at the bottom of the virtual remote to choose which track you want to preview.
8. When you're finished previewing, click the Close button  to return to the main DVD Architect window.

Using an External Video Monitor

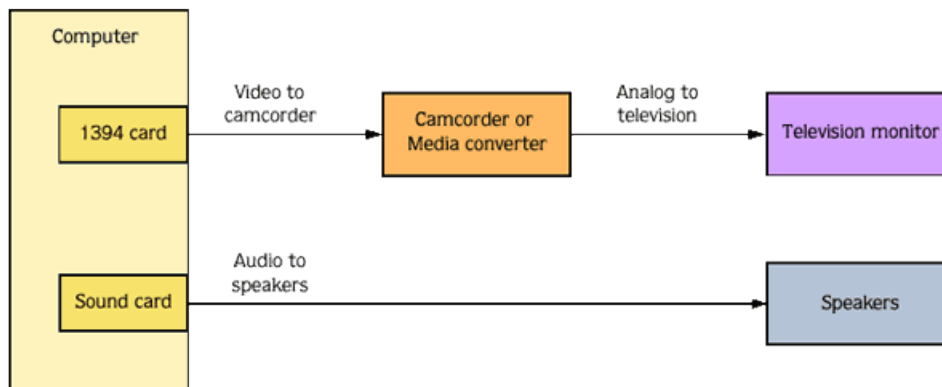
External video preview allows you to reclaim valuable real-estate in the DVD Architect™ Pro window, check colors and safe areas on a broadcast monitor, or just view a full-screen preview of your project.

Previewing Video on an External Video Monitor via IEEE-1394

You can send video directly from the timeline to a television monitor. With this feature, you can make your final editing decisions on a broadcast monitor (which differs significantly from a computer monitor) before [preparing and burning](#) your project. To use an external monitor, you must have the following:

- OHCI-compliant IEEE-1394 DV card
- DV camcorder or DV-to-analog converter

The diagram below shows the preferred setup for sending video from the DVD Architect Video Preview window to an external television monitor.



The video is converted to DV format and sent through the IEEE-1394 card to the DV device (camcorder or DV-to-analog media converter). The DV device sends analog output to the television monitor.

1. Use the [Video Device](#) tab in the Preferences dialog to configure your IEEE-1394 card.
2. Select the Preview on External Monitor button  in the Preview window.



The DV device must support pass through in order to use an external monitor.

Previewing Video on a Secondary Windows Display

If your Windows desktop is extended across multiple displays, you can use one of those displays to preview your DVD Architect project.

To use a secondary windows display, you must have the following:

- A multiple-output graphics card that supports 3D acceleration (or multiple graphics cards: you could install AGP and PCI video cards in your system, for example).

You can also use the Windows Secondary Display device on a computer with a single monitor. When you enable the external monitor, the video preview will fill your screen.

- A CRT, LCD, or projector connected to your computer's secondary video output.
 - The Extend my Windows desktop onto this monitor check box must be selected on the Settings tab or the Display Properties dialog (Start > Settings > Control Panel > Display).
1. Use the [Video Device](#) tab in the Preferences dialog to configure the display you want to use as a video preview monitor.
 2. Select the Preview on External Monitor button  in the Preview window.

You can turn off external preview by clicking the secondary display and pressing Esc.

Customizing the DVD Architect Interface

You can customize the DVD Architect™ Pro interface to suit your needs and working preferences.

Customizing the Toolbar

From the View menu, choose Toolbar to show or hide the main DVD Architect toolbar.

The toolbar is fully customizable. To change the appearance of the toolbar, choose Customize Toolbar from the Options menu.

Adding a button to the toolbar

1. From the Options menu, choose Customize Toolbar.
2. In the Available toolbar buttons column, choose the button you want to add.
3. Click the Add button.
4. Click Close to close the Customize Toolbar dialog.

Removing a button from the toolbar

1. From the Options menu, choose Customize Toolbar.
2. In the Current toolbar buttons column, choose the button you want to remove.
3. Click the Remove button.
4. Click Close to close the Customize Toolbar dialog.

Moving a button

1. From the Options menu, choose Customize Toolbar.
2. In the Current toolbar buttons column, choose the button you want to move.
3. Move the button:
 - Click Move Up to move the button up one space in the Current toolbar buttons list and left one space on the toolbar.
 - Click Move Down to move the button down one space in the Current toolbar buttons list and right one space on the toolbar.
4. Click Close to close the Customize Toolbar dialog.

Resetting the toolbar

1. From the Options menu, choose Customize Toolbar.
2. Click the Reset button.
3. Click Close to close the Customize Toolbar dialog and reset the toolbar to its default appearance.

Saving and recalling window layouts

A window layout stores the sizes and positions of all windows and floating window docks in the DVD Architect workspace.

You can store any number of window layouts on your computer, and up to ten window layouts are available in the View menu (and via keyboard shortcuts) so you can quickly recall frequently used layouts.



Window layouts are saved in the folders listed below. You can transfer layouts between computers by copying the .DVDArchWindowLayout files.

- Windows XP: C:\Documents and Settings\Your Username\Application Data\Vegas\DVD Architect\6.0
- Windows Vista or Windows 7: C:\Users\Your Username\AppData\Roaming\Vegas\DVD Architect\6.0

Saving a window layout

1. Arrange the windows and docked windows as desired.



Press Ctrl+Alt+D, release the keys, and then press a number on your keyboard (not the numeric keypad) to save the layout in that space.

2. From the View menu, choose Window Layouts, and then choose Save Layout As from the submenu. The Save Layout As dialog is displayed.

Choose Save Layout from the submenu if you want to update the current window layout. A bullet (●) is displayed next to the current layout.

3. In the Name box, type the name you want to use to identify the layout. This name will be used in the Organize Layouts dialog.
4. Choose a setting from the Shortcut drop-down list to set the shortcut that will be used to load the layout.

For example, if you choose 4, you could press Alt+D, release the keys, and then press 4 on your keyboard to load the layout.

5. The Folder box displays the path to the folder where the layout will be saved.

Window layouts are saved in the folders listed below by default. You can click the Browse button to choose a different folder.

- Windows XP: C:\Documents and Settings\Your Username\Application Data\Vegas\DVD Architect\6.0
- Windows Vista or Windows 7: C:\Users\Your Username\AppData\Roaming\Vegas\DVD Architect\6.0

6. Click OK to save the new layout.

Loading a saved layout

From the View menu, choose Window Layouts, and then choose the window layout you want to use from the submenu.



To load a layout quickly, press Alt+D, release the keys, and then press a number on your keyboard (not the numeric keypad) to recall the layout saved in that in that space. If no layout is saved in that space, nothing will happen when you press the shortcut.

If you've modified the current window layout, choose Window Layouts, and then choose Reload Selected Layout from the submenu to reset the window layout to the last-saved version.

Adding a layout to the View > Window Layouts submenu

1. From the View menu, choose Window Layouts, and then choose Organize Layouts from the submenu. The Organize Layouts dialog is displayed.
2. Select a layout in the Available layouts in current folder box.

This box lists the .DVDArchWindowLayout files in the folder displayed in the Current layout folder box. If the layout you want to use is saved in a different folder, you can click the Browse button to choose a new folder.
3. Select a layout in the Current layouts in menu box.
4. Click the Assign (or Replace) button—or double-click a layout in the Available layouts in current folder box — to add the layout to the View > Window Layouts submenu.

You can click the Move Up or Move Down buttons to change the order of the layouts in the menu.

5. Click the Activate button — or double-click a layout in the Current layouts in menu box — to apply the selected layout to the DVD Architect workspace.
6. Click OK to close the Organize Layouts dialog and apply your changes.

Removing a layout from the View > Window Layouts submenu

1. From the View menu, choose Window Layouts, and then choose Organize Layouts from the

submenu. The Organize Layouts dialog is displayed.

2. Select a layout in the Current layouts in menu box.
3. Click the Clear button to remove the selected layout from the View > Window Layouts submenu.

If you want to replace the selected layout, select a layout in the Available layouts in current folder box and click the Replace button.

4. Click OK to close the Organize Layouts dialog and apply your changes.



Removing a layout from the View > Window Layouts submenu does not remove the .DVDArchWindowLayout file from your computer.

Deleting a layout from your computer

1. From the View menu, choose Window Layouts, and then choose Organize Layouts from the submenu. The Organize Layouts dialog is displayed.
2. Select a layout in the Available layouts in current folder box.
3. Click the Delete Layout button to remove the selected layout from your computer.



You cannot delete a layout that is included in the Current layouts in menu list. First, select the layout in the Current layouts in menu list and click the Clear button. Next, select the layout in the Available layouts in current folder list and click the Delete Layout button.

4. Click OK to close the Organize Layouts dialog and apply your changes.

Resetting the Default Window Layout

If you want to reset the arrangement of the panes in the DVD Architect window, you can reset your preferences to revert to the original window layout.

1. Close DVD Architect.
2. Restart DVD Architect.
3. Press and hold Ctrl+Shift while the application starts.

Grid Settings

From the Options menu, choose Grid Settings to adjust display settings for the grid in the DVD Architect workspace.

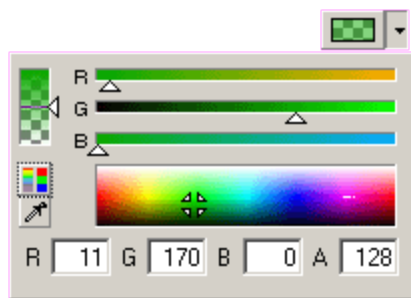


Change grid size or position

1. From the Options menu, choose Grid Settings.
2. Enter values in the Width and Height boxes to set the size of the grid. If you want to lock the grid size so the height and width are equal, select the Lock sizes check box.
3. If you want to shift the grid on the workspace, enter values in the X Offset and Y Offset boxes.

Change grid color

1. From the Options menu, choose Grid Settings.
2. Click the down arrow next to the color swatch to open the color picker, where you can set the red, green, blue, and alpha channels for your grid.



- Drag the R, G, and B sliders to choose a color, and drag the vertical alpha slider to set transparency.
- Type values in the R, G, B, and A boxes.
- Select the eyedropper tool to sample a color from your screen.
- Select the  button to toggle RGB or HSL color mode.

Preferences

The Preferences command contains various user options you can use to customize DVD Architect™ Pro software. To display the Preferences dialog box, choose Preferences from the Options menu.

General Preferences

From the Options menu, choose Preferences and select the General tab to specify general user options.

Item	Description
Show logo splash screen on startup	When this option is checked, the DVD Architect logo splash screen will be displayed when DVD Architect starts.
Use Microsoft DV reader	When this option is checked, the software will always use the Microsoft DV codec for displaying and rendering DV. This option can help resolve problems viewing DV.
Double-clicking files in Explorer window reapplies theme layout	Select this check box if you want to automatically realign objects according to the current theme when you double-click media files in the Explorer window: the new file is added, and the objects are realigned on the menu. When the check box is cleared, the media files are added to the menu and existing object positions are preserved.
Use best stretching algorithm during rendering	Select this check box if you want to use bicubic stretching during rendering. This setting produces higher-quality images, but rendering time is increased. When the check box is cleared, bilinear stretching is used.
Automatically open last project on startup	When check box is selected, the software will reopen the last project that was open when you exited.
Media goes offline on loss of focus	When this check box is selected, media files are released when the DVD Architect window does not have focus. The files will be reloaded when you switch back to the DVD Architect window.
Multimedia keyboard support	When this check box is selected, you can use a multimedia keyboard to control project playback.
Disable popup animations	Select this check box to turn off the animation that occurs when you edit text. The animation will help you locate which text box you're editing.

Item	Description
Automatically link similar audio and video files	Select this check box if you want the software to look for and link audio files with the same base name when you add a video-only file to your project. For example, if you had a video-only MPEG file (MyProject.mpg) and an audio file (MyProject.wav) in the same folder, the software will automatically use MyProject.wav as the audio track when you add MyProject.mpg to a menu. Clear the check box if you want to add your audio files manually.
Skip drive database; autodetect drive capabilities	When the check box is cleared, the software will use an internal configuration file to determine your drive's capabilities. If you encounter problems burning discs, select this check box, and the software will test your drive to determine its capabilities.
Disable screen saver during preview	Select this check box if you want to suspend your screen saver when you're previewing your project.
Double-clicking themes applies them to all pages of a menu	Select this check box if you want to apply a theme to all pages in a menu when you double-click a theme in the Themes tab. When the check box is cleared, the theme is applied to the current page only.
Automatically name markers	Select this check box if you want to automatically assign names to markers when you add them to videos. When the check box is cleared, an edit box is displayed after you add a marker.
Display file name labels on media events in timeline	Select this check box if you want to display the names of source files for audio and video events in the Timeline window.
Enable Windows XP theme support	When this check box is selected, the DVD Architect window will inherit the appearance of the current theme when using Windows XP. When the check box is cleared, user interface elements will maintain the classic Windows appearance.
Check project file type associations at startup	When this check box is selected, DVD Architect will check whether DVD Architect files are associated with DVD Architect software and will prompt you to restore the file association if necessary.
Allow pulldown removal when opening 24p DV	Select this check box if you want to remove pulldown when you open 24 fps progressive-scan DV video files. When the check box is cleared, 24p video is read as 29.97 fps interlaced video (60i).

Item	Description
Always estimate maximum size	When this check box is selected, DVD Architect will estimate the maximum possible size when calculating available disc space for your project. When the check box is cleared, DVD Architect will use the standard estimation method, which provides more accurate results.
Use Direct Sound Surround Mapper	Select this box if your audio has unwanted pops or clicks.
Recently used project list	Select the check box and enter a number in the edit box if you want to list your most recently used projects at the bottom of the File menu.
Default All	Restores the General page to the default settings.

Video Preferences

From the Options menu, choose Preferences and select the Video tab to choose the graphics editor you want to use when you choose to edit a graphic in your DVD Architect project.

The Preferred graphics editor box displays the path to the application that will be used. Click the Browse button to choose a different application, or click Clear to remove the associated application.

When the box is empty, DVD Architect software will use the application associated with the file type when you right-click a graphic and choose Open in Graphics Editor from the shortcut menu.

Video Device Preferences

From the Options menu, choose Preferences and then click the Video Device tab to configure an external monitor device.

Your video will be sent to this device when you choose Preview on External Monitor from the Options menu or click the Preview on External Monitor button  in the Preview window.

OHCI-compliant IEEE-1394/DV

1. From the Options menu, choose Preferences, and then click the Video Device tab.
2. From the Device drop-down list, choose OHCI Compliant IEEE 1394/DV. The Details box displays information about the device.

3. Choose the desired format from the Format drop-down list:
 - To simulate the letterboxing that is displayed when widescreen content is played on a 4:3 screen, choose NTSC DV or PAL DV instead of a widescreen setting. Widescreen frames will automatically be letterboxed by the external monitor driver for a 4:3 display. As you switch between 4:3 and 16:9 material, letterboxes will be added as needed.
 - To simulate anamorphic widescreen output from a DVD or Blu-ray Disc player to a widescreen display, choose NTSC DV Widescreen or PAL DV Widescreen. Note that the video device driver does not switch aspect ratios, so 4:3 material will be shown as widescreen output with pillarboxing on the sides. The same content on a widescreen-enabled player and display would auto-switch between 16:9 and 4:3 display if both devices supported widescreen signaling.
4. Select a radio button to indicate when you want to adjust the output to the selected format:

Setting	Description
Only when the project does not match any DV format	Select this radio button if you want to adjust the video only if the project settings do not match a standard DV format.
Always	Select this radio button if you want to adjust the video output to the selected format whenever you preview on the external monitor. Use this setting when you do not have a preview device that supports your required project format. For example, if you're creating a PAL project, but you don't have a PAL monitor, you could use this setting to preview on an NTSC monitor.

Secondary Windows Display



You can also use the Windows Secondary Display device on a computer with a single monitor. When you enable the external monitor, the video preview will fill your screen.

1. From the Options menu, choose Preferences and then click the Video Device tab.
2. From the Device drop-down list, choose Windows Secondary Display. The Details box displays information about the device.
3. From the Display Adapter drop-down list, choose the device where your preview monitor is connected.

You can click the Identify Displays button to determine which display corresponds to each setting in the drop-down list. A number will be displayed on each monitor.



If the monitor number is displayed in red, the graphics card does not support 3D acceleration or acceleration has been turned off. You can go to Start > Settings > Control Panel > Display > Settings > Advanced > Troubleshoot to turn on acceleration if your adapter supports it.

4. From the Display Mode drop-down list, choose the frame size and refresh rate you want to use for the secondary display.

Setting	Description
Use Current Settings	Video is displayed using the monitor's resolution and refresh rate specified in the Windows Display Properties control panel.
Automatic Size Settings	The software will attempt to choose the optimum resolution and refresh rate. This setting overrides the Windows Display Properties setting as long as the secondary display window is active.
Pick Custom Settings	You can choose the resolution and refresh rate you want to use. This setting overrides the Windows Display Properties setting as long as the secondary display window is active.

5. Select the Scale output to fit display check box if you want the video preview to fill the display.
6. Select the Apply deinterlace filter check box if you're previewing interlaced video on a noninterlaced display. This filter can reduce the artifacts you often see on the edges of moving areas.



The Apply deinterlace filter check box will be unavailable if your video adapter does not support pixel shading.

7. If you want to adjust color reproduction for video previews, use the color management controls.
 - a. Select the Use color management check box.
 - b. Select the Use Studio RGB check box if your source media conforms to studio RGB color (black=16 and white=235) and you will be previewing on your computer's CRT or LCD monitor. When the check box is selected, the studio RGB range is expanded to 0 to 255 to conform to a computer display.

Clear the check box if you will be previewing on a TV monitor or if your source media does not conform to studio RGB color.
 - c. From the Monitor color profile drop-down list, choose the color profile that best matches your display.

You can obtain ICC/ICM color profiles from the display manufacturer, or you can create your own if you have a calibration system.



The Use color management check box will be unavailable if your video adapter does not support gamma adjustment.

8. Click OK to close the Preferences dialog.

Editing Preferences

From the Options menu, choose Preferences and select the Editing tab to specify options for editing.

Item	Description
Action safe area	Allows you to specify a percentage for the border size in the video's safe area. Video within this safe area will always be visible on a television monitor. To display or hide safe area borders in the workspace, choose Workspace Overlays from the View menu and then choose Show Action Safe Area from the submenu.
Title safe area	Allows you to specify a percentage for the border size in the video's safe title area. Video within this safe area will always be visible on a television monitor. To display or hide safe area borders in the workspace, choose Workspace Overlays from the View menu and then choose Show Title Safe Area from the submenu.
Paste offset	Type values in the X and Y boxes if you want to offset items when you paste them. If you enter 0 in both boxes, objects will be pasted directly over the source object when you copy and paste in the same menu.
Brightness/contrast modifier	Allows you to specify the percentage by which you adjust contrast when you use the Increase Contrast  , Decrease Contrast  , Increase Contrast Center  , and Decrease Contrast Center  buttons in the Crop and Adjust and Compilation windows.
Limit number of undo buffers	Select this check box and type a number in the box if you want to limit the number of undo buffers that the software creates. Reducing the number of undo buffers can conserve memory.
Default All	Restores the Editing page to the default settings.

Display Preferences

From the Options menu, choose Preferences and select the Display tab to specify options for the appearance of the DVD Architect workspace.

Item	Description
Icon color saturation	Drag the slider to adjust the color intensity of icons in the DVD Architect window. Drag to the left to decrease the color saturation, or drag to the right to increase it.

Item	Description
Icon color tint	Drag the slider to adjust the amount of tinting that is applied to the icons in the DVD Architect window. Drag the slider to the right to add an average of the Windows title bar colors to the icons. Drag to the left to decrease the amount of tinting applied.  You can use the Display Properties control panel to change your active window title bar colors. In Windows XP, open the Display Properties control panel and select the Appearance tab. Then click the Advanced button and choose Active Title Bar from the Item drop-down list. In Windows Vista, open the Appearance and Personalization control panel and click the Customize Colors link in the Personalization section. Next, click the Open classic appearance properties for more color options link. Then click the Advanced button and choose Active Title Bar from the Item drop-down list.
Selected items color	Click to display a color picker, where you can set the color for selected items in the DVD Architect workspace using red, green, blue, and alpha values.
Button overlap color 1	Click to display a color picker, where you can set the color for buttons that overlap in the DVD Architect workspace using red, green, blue, and alpha values.
Button overlap color 2	Click to display a color picker, where you can set the color for buttons that overlap in the DVD Architect workspace using red, green, blue, and alpha values.
Default All	Restores the Display page to the default settings.

Preview Preferences

From the Options menu, choose Preferences and select the Preview tab to specify options for previewing projects.

Item	Description
Fast forward/rewind amount	Type a value in the box to specify how far playback will be advanced/reversed when you click the  and  buttons while previewing your project.
Super fast forward/rewind amount	Type a value in the box to specify how far playback will be advanced/reversed when you click the  and  buttons while previewing your project.
Region	Choose a region code from the drop-down list to indicate the region to be used during project previews.  This option is not available for Blu-ray Disc projects.

Item	Description
Aspect Ratio	Choose an aspect ratio from the drop-down list to indicate whether your project should be previewed in standard (4:3) or widescreen (16:9) format by default.
Parental control	Choose a parental management level from the drop-down list to simulate for project previews.  This option is not available for Blu-ray Disc projects.
Menu	Choose a menu language from the drop-down list to specify the default language for your disc menus while previewing your project.
Audio	Choose an audio language from the drop-down list to specify the default language for your audio tracks while previewing your project.
Subtitles	Choose a subtitle language from the drop-down list to specify the default language for subtitles while previewing your project.
Default All	Restores the Preview page to the default settings.

Burning Preferences

From the Options menu, choose Preferences and select the Burning tab to specify options for project preparation and burning.

Item	Description
Free space display type	Choose a setting from the drop-down list to choose how your project size is represented in the bottom-right corner of the DVD Architect window. 
Default prepare folder	Displays the path to the folder where DVD Architect software will prepare your project. Click the Browse button to choose a different folder. DVD Architect displays the amount of available storage space for the selected folder.
Temporary files folder	Displays the path to the folder where DVD Architect software will store temporary files it creates. Click the Browse button to choose a different folder. DVD Architect displays the amount of available storage space for the selected folder.
Minimum video bit rate	Choose a setting to indicate the minimum allowed bit rate that will be used when DVD Architect software recompresses video files.

Item	Description
Use legacy disc drivers	Select this check box to use the legacy DVD Architect disc drivers for burning discs. Clear this check box to use the Microsoft Image Mastering API (IMAPI) disc drivers to burn discs in DVD Architect software. This can be useful if burning discs with the legacy disc drivers is not working as you expect.
Default All	Restores the Burning page to the default settings.

Mastering Preferences

From the Options menu, choose Preferences and select the Mastering tab to specify options for project preparation and burning.

Item	Description
Mastering output folder	Displays the path to the folder where DVD Architect software will create files when you save mastering files to your hard drive. Click the Browse button to choose a different folder. DVD Architect displays the amount of available storage space in the selected folder.
Default All	Restores the Mastering page to the default settings.

Keyboard Shortcuts

From the Help menu, choose Keyboard Shortcuts to view the shortcut keys that are available in the DVD Architect™ Pro window. The available shortcut keys are arranged in tables according to function.

Project file

Command	Keyboard Shortcut
Create new project	Ctrl+N
Open existing project	Ctrl+O
Save project	Ctrl+S
Project properties	Alt+Enter
Exit	Alt+F4

Magnification and view

Command	Keyboard Shortcut
Focus to workspace	Alt+0
Show/hide editing toolbar	Alt+1
Show/hide text toolbar	Alt+2
Show/set input focus to the Explorer window	Alt+3
Show/set input focus to the Themes window	Alt+4
Show/set input focus to the Buttons window	Alt+5
Show/set input focus to the Backgrounds window	Alt+6
Show/set input focus to the Compilation window	Alt+7
Show/set input focus to the Properties window	Alt+8
Show/set input focus to the Timeline window	Alt+9
Show/set input focus to the Project Overview window	Ctrl+Alt+1
Show/set input focus to the Playlists window	Ctrl+Alt+2
Show/set input focus to the DVD Scripts window	Ctrl+Alt+3
Show/set input focus to the Crop and Adjust window	Ctrl+Alt+4
Show/hide bottom panel	F11
Show/hide side panel	Shift+F11
Show/hide grid	Ctrl+G

Command	Keyboard Shortcut
Show/hide button masks	Ctrl+B
Show first/last page	Home/End
Show previous/next page	Page Up/Page Down
Recall window layout	Alt+D, then press 0-9
Save window layout	Ctrl+Alt+D, then press 0-9

General editing

Command	Keyboard Shortcut
Undo last action	Ctrl+Z
Redo last action	Ctrl+Shift+Z
Cut	Ctrl+X
Copy	Ctrl+C
Paste	Ctrl+V
Delete	Delete
Select All	Ctrl+A
Edit selected text	F2
Move selection between objects	Tab
Move object to top/bottom	Ctrl+Home/End
Move object forward/back	Ctrl+Page Up/Page Down
Move selected objects up/down by grid spacing	Up Arrow/Down Arrow
Move selected objects right/left by grid spacing	Right Arrow/Left Arrow
Switch to next editing tool	D
Switch to previous editing tool	Shift+D
Selection tool	Ctrl+D
Edit grid settings	Ctrl+Shift+G
Enable snapping	F8
Snap to grid	Ctrl+F8
Snap to objects	Shift+F8
Snap to safe areas	Ctrl+Shift+F8

Inserting objects and titles

Command	Keyboard Shortcut
Insert text	Ctrl+T
Insert submenu	Ctrl+M

Command	Keyboard Shortcut
Insert picture compilation	Ctrl+L
Insert music/video compilation	Ctrl+K
Insert media	Ctrl+F

Timeline window

Command	Keyboard Shortcut
Zoom in/out	Up/Down Arrow
Move cursor to set in/out point	Home/End
Move cursor to beginning/end of timeline	Ctrl+Home/End
Move cursor to beginning/end of viewable area of timeline (when zoomed in)	Alt+Home/End
Move cursor left/right	Right/Left Arrow
Move one frame left/right	Alt+Right/Left Arrow
Preview current title in workspace starting at the timeline cursor position	Spacebar
Preview current title in workspace starting at the set in point	Shift+Space
Insert chapter	M
Set in/out points	I/O
Set loop point	L
Insert audio track	Ctrl+Q
Insert video track	Ctrl+Shift+Q
Insert subtitle track	Ctrl+Alt+Q
Insert subtitle text on active track and make subtitle text editable	Ctrl+Shift+T
Insert subtitle text on all selected tracks without editing text	T

Preview

Command	Keyboard Shortcut
Previous/next chapter or page	Page Up/Page Down
	Prev Track/Next Track (Windows multimedia keyboard only)
Fast forward/reverse	Ctrl+Left/Right Arrow
Super fast forward/reverse	Ctrl+Shift+Left/Right Arrow
Preview current title in Preview window starting at the timeline cursor position	F9
Preview disc in Preview window	Ctrl+F9
Preview current title in Preview window starting at the set in point	Shift+F9

Command	Keyboard Shortcut
Preview current title in workspace starting at the timeline cursor position	Spacebar
Preview current title in workspace starting at the set in point	Shift+Spacebar

Mouse shortcuts

Command	Keyboard Shortcut
Copy object	Ctrl+drag object
Override snapping	Shift+drag object
Constrain motion horizontally or vertically	Alt+drag object
Resize object from center	Ctrl+drag edge of object with sizing tool 
Resize proportionally	Shift+drag edge of object with sizing tool 
Resize object proportionally from center	Ctrl+Shift+drag edge of object with sizing tool 

Using a Multimedia Controller

DVD Architect™ Pro software supports several multimedia controllers that you can use for mouse-free editing and playback. Now you can increase your productivity and still have a free hand for your coffee mug.

This topic is intended to show you how DVD Architect software interacts with several multimedia controllers that we're familiar with and have tested. Other controllers may also work.

For specific information about your multimedia controller, please refer to the manufacturer's documentation.

Contour ShuttlePro default settings

ShuttlePro .pref files are included with your DVD Architect installation. You can use these files to configure the Contour ShuttlePro or ShuttlePro v2 for use with DVD Architect software.

 If you have version 2.5 or later of the Shuttle Pro driver, you can use the driver's Export Settings Info feature to create a graphical representation of your current settings.

Contour ShuttleXpress default settings

ShuttleXpress .pref files are included with your DVD Architect installation. You can use these files to configure the Contour ShuttleXpress for use with DVD Architect.

 If you have version 2.5 or later of the ShuttleXpress driver, you can use the driver's Export Settings Info feature to create a graphical representation of your current settings.

Navigating the timeline with a ShuttlePro or SpaceShuttle

Use shuttle ring and jog dial to navigate the timeline. The shuttle ring moves the cursor left or right, and the jog dial moves the cursor in one-frame increments.

Navigating the timeline with a PowerMate or other controller

If you have a multimedia controller such as the Griffin Technology PowerMate, you can map your controller to the Alt+Left/Right Arrow frame jog keys.

Map the single-button function to the F9 key for Preview.

Troubleshooting

When you're looking for answers to why your project isn't working quite right or can't be burned to disc, check out these troubleshooting topics.

The Common Problems section includes answers to the most frequent problems you might find while working in DVD Architect™ Pro software.

If you're having trouble preparing or burning a disc, review the error, warning, and informational messages sections for explanations of all possible messages and how to resolve them.

Troubleshooting Common Problems

If you run into trouble, this topic can help you get back on your feet.

DVD or Blu-ray Disc player's Next button goes to next title rather than chapter

The Next button is normally used to navigate to the next chapter. On many players, the Next button either jumps to the end of the title or does nothing when viewing the last chapter. However, on some DVD and Blu-ray Disc players, this button jumps to the next title when viewing the last chapter.

To prevent the next button from jumping to the next title, turn off Title play.

1. In the Project Overview window, double-click the title want to edit.
2. In the Properties window, click the Remote Buttons button.
3. Select Title play and choose Off from the shortcut menu.

DVD or Blu-ray Disc player's Previous button doesn't navigate to the previous title in a playlist

Some DVD and Blu-ray Disc players allow the Previous button to navigate to the previous title when viewing the first chapter in a title. However, the previous title is determined by the order of titles written to disc, not the playlist order.

To prevent the Previous button from jumping to the previous title, turn off Title play.

1. In the Project Overview window, double-click the title want to edit.
2. In the Properties window, click the Remote Buttons button.
3. Select Title play and choose Off from the shortcut menu.

Color set colors don't match background

Colors used by menu highlight and subtitles are interpreted differently by some DVD and Blu-ray Disc players. The color may match the background video or image when you preview your project, but not when the disc is played in a player.

This is a limitation of the player and cannot be resolved in the software.

Button highlights shifted slightly to the right

Some DVD or Blu-ray Disc players may shift the menu highlight slightly to the right when the menu resolution is neither 720x480 (NTSC) or 720x576 (PAL).

The DVD specification does not prescribe how to handle highlights for menus that are not 720x480 (NTSC) or 720x576 (PAL) – including half-D1 menus. Because inconsistencies exist among players, this is not something that can be fixed by DVD Architect software.

The best solution is to use standard-resolution menus: on the Project Properties or Optimize Disc dialog, set your Project video format to NTSC (720x480), NTSC Widescreen (720x480), PAL (720x576), or PAL Widescreen (720x576).

Video and menu colors don't match

If you create a title that transitions from a menu (using menu end actions), you may notice a difference in colors between the menu and the title video.

Some DVD and Blu-ray Disc players allow the user to change the picture mode to adjust the colors. However, the picture mode is applied only to titles, not menus, which causes the discrepancy.

Make sure the player's picture mode is set to none or standard.

My project fails during the preparation stage

Disc preparation can fail if your project contains complex subtitles or highlight masks.

The DVD specification does not allow subpicture graphics that are too complex overall or on a horizontal line. Please check your project for complex subtitles or complex highlight masks that may prevent your project from being prepared.

If you have subtitles with large amounts of text, break the text into separate lines or events. Avoid using highlight masks with high levels of detail or simplify the mask images.

The wrong audio/subtitle track plays when I navigate between titles

When setting up your project, we recommend using the same track sequence for all videos, picture compilations, and music/video compilations. If necessary, insert empty audio or subtitle tracks to maintain the track sequence so that the disc will continue to play the same track number when you transition playback between titles.

- For more information about adding audio tracks, see "[Adding audio tracks](#)" on page 132.
- For more information about adding subtitle tracks, see "[Adding subtitles](#)" on page 137.

The text on my menus is blurred

Some DVD and Blu-ray Disc players will not display the last frame of a menu correctly when using interlaced background video.

If you use a background video in your menu, we recommend rendering the video in progressive-scan format before adding it to your project. On the Video tab of the Optimize Disc dialog, click the Progressive box and choose Auto to render the noncompliant menu as progressive-scan video. Progressive-scan menus will provide the sharpest-looking text and highest level of player compatibility.

If you need to use interlaced video as a menu background, click the Progressive box and choose No. When you choose No, the noncompliant menu will be rendered as interlaced video.

My menu isn't displayed correctly

Some DVD and Blu-ray Disc players will not display the last frame of a menu correctly when using interlaced background video.

If you use a background video in your menu, we recommend rendering the video in progressive-scan format before adding it to your project. On the Video tab of the Optimize Disc dialog, click the Progressive box and choose Auto to render the noncompliant menu as progressive-scan video. Progressive-scan menus will provide the sharpest-looking text and highest level of player compatibility.

If you need to use interlaced video as a menu background, click the Progressive box and choose No. When you choose No, the noncompliant menu will be rendered as interlaced video.

My music/video compilation doesn't look right

If the audio in a compilation item is longer than the video, the last frame is frozen until the end of the audio. If the video is interlaced, some DVD and Blu-ray Disc players will not display this frame correctly.

Recompressing your compilation as progressive-scan video will avoid this problem.

On the Video tab of the Optimize Disc dialog, click the Progressive box and choose Yes or Auto for your music/video compilation. If you choose Yes, each compilation item is recompressed as a separate progressive-scan title. If you choose Auto, each compilation item is recompressed as a separate title and will match the format of the source media. If the audio is longer than the video, the compilation item will be recompressed as progressive-scan video to prevent artifacts when the last frame is held.

My menu buttons aren't animated

After you set a button to use a video file for its thumbnail, you need to tell the software that you want the button to be animated. Use the Button Properties pane to edit the action and appearance of the selected menu button.

1. If the window isn't already visible, choose Properties from the View menu.
2. Double-click a menu in the Project Overview window (or navigate in the workspace) to open the menu you want to edit.
3. Select a button in the workspace with the selection , sizing , or navigation  tool.
4. Click the Media button at the top of the Properties window.
5. Under the Thumbnail Properties heading, click the Style row, and then choose Animated from the menu.
6. When Animated is selected, the animated thumbnail file is played in the button frame. The Start time setting determines the point where playback begins.
7. When Still is selected, the button displays a static image. If your thumbnail file is animated, the Start time setting determines which frame is displayed.

Error Messages

When you prepare or burn a disc, DVD Architect™ Pro software checks to make sure your project is compliant with the DVD or Blu-ray Disc specification. Any problems are displayed on the Review Messages page of the prepare or burn wizard. Review the message list and make any necessary adjustments.

Error messages are marked with a red exclamation point . You must resolve these errors before continuing.

Could not suggest a valid layer break

The smart prepare data for your project is corrupt or not accessible. To recover this data, reprepare your project. For more information, see "[Preparing your DVD project](#)" on page 230.

DVD script uses too many instructions

Each DVD script can contain a maximum of 128 instructions. DVD script statements are used by DVD Architect to create DVD instructions, so you will need to remove statements from your DVD script before you can prepare your project. Follow the steps below to delete statements.

1. Double-click a DVD script in the Project Overview window (or choose a script from the drop-down list at the top of the DVD Scripts window) to open the script you want to edit.
2. Select a statement in the DVD Scripts window.
3. Press Delete or click Delete Statement .

Extra content folder is not allowed in Blu-ray Disc

The extra content folder is not available for Blu-ray Disc projects. Clear the Extras folder specified on the Disc Properties page in the Project Properties dialog. For more information, see "[Adding data files to a disc](#)" on page 130.

Insert chapter marker in title

The specified title requires an additional chapter marker between the identified chapters. You can add chapter markers from the Timeline window. For more information, see "[Inserting markers](#)" on page 26.

Media file is offline

One or more of the media files in your project is offline.

Close and reopen the project, and you'll be prompted to specify a new location or replacement file. For more information, see ["Opening a project"](#) on page 119.

Media file is referenced by too many titles

The media file listed in the error message is associated with more than 99 titles.

Delete some buttons that link to the media file, or consider using a playlist: each project can contain up to 255 playlists with 255 playlist items each. For more information, see ["Deleting objects"](#) on page 175 and ["Playlists"](#) on page 198.

Menu highlight is too complex

If a subpicture graphic is overly complex (overall or on a horizontal line), it cannot be compressed to meet the requirements of the DVD specification.

This message indicates that the menu's highlight mask is too complex overall.

If you're using a custom mask image (when the Custom highlighting style is selected in the Button Properties controls), try the following:

- You can reduce overall complexity by reducing the amount of detail in the highlight mask image.
- Look for areas in the image that alternate between colors and reduce colors in those areas.
- Reduce the number of colors in the image.

If you're using a text mask (when the Mask overlay or Text mask overlay highlighting style is selected in the Button Properties controls), try the following:

- Apply a different highlighting style.
- Reduce the amount of button text.
- Reduce the number of buttons on each menu page.

Menu highlight is too complex due to horizontal lines

If a subpicture graphic is overly complex (overall or on a horizontal line), it cannot be compressed to meet the requirements of the DVD specification.

This message indicates that the menu's highlight mask is too complex horizontally.

If you're using a custom mask image (when the Custom highlighting style is selected in the Button Properties controls), try the following:

- Look for areas in the image that alternate between colors in a horizontal line and reduce colors in those areas.
- You can reduce overall complexity by reducing the amount of detail in the highlight mask image.
- Reduce the number of colors in the image.

If you're using a text mask (when the Mask overlay or Text mask overlay highlighting style is selected in the Button Properties controls), try the following:

- Apply a different highlighting style.
- Reduce the amount of button text.
- Reduce the number of buttons on each menu page.

One or more files in the extra content folder are too large

The maximum allowed file size for a file in your extras folder is 2 GB.

Delete the offending files from your extras folder and prepare your project again.

The path to the extras folder is displayed on the Disc Properties page in the Project Properties dialog. For more information, see "[Adding data files to a disc](#)" on page 130.

One or more menu links overlap

This message indicates that a button or text box is overlapping another link. If you're creating a DVD project, you can burn your project with overlapping links, but your disc can be more difficult to navigate: when you highlight one link, the overlapping link may also be highlighted. If you're creating a Blu-ray Disc project, you cannot prepare your project with overlapping menu links; you must fix the issue before proceeding.

Navigate to the page and move the link as necessary. When you preview the page, move the highlight among links until you can see which objects overlap.

For more information, see "[Arranging and moving menu objects](#)" on page 173 "[Previewing Your Project](#)" on page 266.

Playlist has more than 255 items

Each playlist can contain a maximum of 255 items.



Please note that DVD projects are limited to 99 titles (videos, music/video compilations, or picture compilations). Each playlist can reference a title more than once, but the playlist can have no more than 255 items.

1. Double-click a playlist in the Project Overview window (or choose a playlist from the drop-down list at the top of the Playlists window) to open the playlist you want to edit.
2. Select the items in the Playlists window that you want to remove from the selected playlist.
3. Delete the selected items, or press Ctrl+X to cut the items to the clipboard.
4. If you want to paste the items to a new playlist, click the Insert Playlist button  in the Playlists window to create a new playlist, click OK to close the Select Titles dialog, and then press Ctrl+V to paste the items into the new playlist.

Project has more than 4,095 scripts

Each DVD project can contain a maximum of 4,095 scripts. Right-click a DVD script in the Project Overview window and choose Delete from the shortcut menu.

Subtitle event is too complex

If a subpicture graphic is overly complex (overall or on a horizontal line), it cannot be compressed to meet the requirements of the DVD specification.

This message indicates a subtitle event that is too complex overall. Try the following to reduce overall complexity:

- Divide the event into multiple events.
- Turn off text outlining.
- Use a different font or font size.

For more information, see "[Adding subtitles](#)" on page 137.

Subtitle event is too complex due to horizontal lines

If a subpicture graphic is overly complex (overall or on a horizontal line), it cannot be compressed to meet the requirements of the DVD specification.

This message indicates a subtitle event that is too complex in a horizontal line. Try the following to reduce horizontal complexity:

- Add line breaks to the subtitle event.
- Turn off text outlining.
- Use a different font or font size.

For more information, see "[Adding subtitles](#)" on page 137.

The estimated total size of all menus is greater than the maximum

The total size of all menus cannot exceed 1 GB. Your project's estimated menu size exceeds the limit, and your project cannot be prepared until you reduce the total menu size.

Deleting background images and audio from your menus may help you conserve space. For more information, see "[Menu Page Properties](#)" on page 55.

The extra content folder can neither contain the prepare folder, nor be contained by the prepare folder

The project's extra content folder cannot contain – or be contained by – the folder where you prepare your project.

Move the extra content folder and then update the Extras folder specified on the Disc Properties page in the Project Properties dialog. For more information, see "[Adding data files to a disc](#)" on page 130.

The extra content folder contains too many files

You can have a maximum of 10,000 files in your extras folder.

Delete some files from your extras folder and prepare your project again.

The path to the extras folder is displayed on the Disc Properties page in the Project Properties dialog.

For more information, see "[Adding data files to a disc](#)" on page 130.

The extra content folder is too large

The extras folder contains more files than the space available on your disc.

Delete some files from your extras folder and prepare your project again.

The path to the extras folder is displayed on the Disc Properties page in the Project Properties dialog.

For more information, see "[Adding data files to a disc](#)" on page 130.

The inactive button default colors should be set to None

Color sets are not supported for inactive buttons in Blu-ray Disc projects. You must set the Inactive button colors drop-down list to None (all transparent) on the General tab of the Menu Page Properties. For more information, see "[Menu Page Properties](#)" on page 55.

The menu end action is broken

The link for the specified menu's end action is broken.

This can occur when you delete items from your project. For example, if the end action of menu one is set to activate a button that navigates to menu two, the end action of menu one will be broken if you delete menu two from your project.

1. Navigate to the menu with the broken end action and click the  button next to the Menu Page Properties heading to expand the Menu Page Properties controls.
2. Click the  button next to the End Action heading to expand the controls.
3. Choose a new setting from the Button drop-down list to resolve the broken link.

For more information, see "[Menu Page Properties](#)" on page 55.

The music/video compilation contains more than 255 slides

A music/video compilation can have no more than 255 songs/videos.

1. Double-click a music/video compilation in the Project Overview window (or double-click a button on a menu in the workspace) to open the associated compilation.
2. Use the Compilation window to remove songs or videos from the compilation. For more information, see "[The Compilation window](#)" on page 24.

The number of markers exceeds the maximum

The number of markers in the media file exceeds the maximum of 255.

Edit the file and delete some markers. For more information, see "[Editing source projects](#)" on page 126.

The overall bit rate is greater than X Mbps

For Blu-ray Disc projects, the maximum overall bit rate for an asset depends upon the number of video angles. For information on maximum bit rates for assets with video angles, see "[Adding video tracks](#)" on page 134. You must adjust the individual video and/or audio bit rates of the specified title before you can continue preparing your disc.

The project has more than 255 playlists

Each disc can contain a maximum of 255 playlists.

1. From the View menu, choose Playlists to display the Playlists window if it isn't already visible.
2. Select the playlists you want to remove.
3. Click the Delete Playlist button .

The project has too many titles that use unique media

Each project can contain no more than 99 media files.

Rerender your media to combine related clips and use chapter markers in the media files rather than creating multiple files where possible.



To avoid rerendering, you can create a music/video compilation made up of video files. This video compilation behaves much like a playlist, but it will be written to your DVD as a single video title set. If you have a project with many short videos, this loophole in the 99-title-set limitation imposed by the DVD specification can save you from rerendering and combining media. For more information, see "[Music/video compilations](#)" on page 186.

The project may not be compatible with some DVD players because it uses too many titles

Most players do not support more than 99 titles. Select titles in the Project Overview window and delete them.

The remote menu button action is broken

The action assigned to the Menu button on the remote control refers to a broken link.

This can occur when you delete items from your project. For example, if the Menu button is set to link to menu two, the Menu button action will be broken if you delete menu two from your project.

1. Navigate to the title with the broken action and click the  button next to the Media Properties heading to expand the Media Properties controls.
2. Click the  button next to the Remote Buttons heading to expand the controls.
3. Click the  button next to the Menu heading to expand the controls, and then choose a new setting from the Destination drop-down list to resolve the broken link.

For more information, see "[Media Properties](#)" on page 67.

The timeout of a menu occurs before the loop point

The menu's loop point establishes the point at which buttons will be displayed. If the menu's timeout occurs earlier than the loop point, the menu's buttons will not be displayed.

Use the General page in the Menu Page Properties pane to adjust the loop point so it occurs before the timeout, or use the End Action page to adjust the timeout so it occurs after the menu's loop point. For more information, see "[Menu Page Properties](#)" on page 55.

The title has more than 16 subtitle tracks

Widescreen titles can have a maximum of 16 subtitle tracks.

Navigate to the title and remove tracks, or change the aspect ratio of the asset in the Optimize Disc dialog.

For more information, see "[Adding subtitles](#)" on page 137 and "[Optimizing your project](#)" on page 119.

The video has a bit rate that is too high to play properly on some players

When the bit rate of a video is too high, it may not play back properly on some players. Recompress with a lower bit rate.

1. Select the title in the Optimize Disc dialog and click the Video tab.
2. Select the Recompress box, click the  button, and choose Yes from the menu.
3. Select the Use default bit rate box, click the  button, and choose Yes from the menu to recompress using the project's default bit rate.

For more information, see "[Optimizing your project](#)" on page 119.

There are too many menu pages

Your project has too many menu pages. Each project can contain a maximum of 1023 pages.

Delete pages as necessary, and then prepare your project again. For more information, see "[Deleting a page](#)" on page 150.

There are too many titles

A Blu-ray Disc project can have a maximum of 999 unique titles. Select titles in the Project Overview window and delete them. For more information, see "[Deleting a menu or title](#)" on page 29.

There is not enough space in the temporary files folder for preparing the disc

There is not enough space in your temporary files folder to prepare your project. You can specify a different folder on the Burning tab of the Preferences dialog.

Choose a folder on the drive where you have the most available space.

For more information, see "[Burning Preferences](#)" on page 283.

Title is too short

A multiangle title in a Blu-ray Disc project must be at least 10 seconds long. Either edit the specified title to make it at least 10 seconds, or select the title in the Project Overview window and replace it with a different title of at least 10 seconds. For more information, see "[The Project Overview window](#)" on page 29.

Too many buttons on a menu

Menus in a DVD widescreen project can have a maximum of 18 buttons, and menus in a DVD full-screen project can have a maximum of 36 buttons. Menus in a Blu-ray Disc project can have a maximum of 255 buttons.

Navigate to the menu and delete objects as necessary. For more information, see "[Deleting objects](#)" on page 175.

Video cannot be recompressed because its bit rate is too low

When the bit rate of a video is too low, it may not play back properly on some players. Recompress with a higher bit rate.

1. Select the title in the Optimize Disc dialog and click the Video tab.
2. Select the Recompress box, click the  button, and choose Yes from the menu.
3. Select the Use default bit rate box, click the  button, and choose Yes from the menu to recompress using the project's default bit rate.

For more information, see "[Optimizing your project](#)" on page 119.

Warning Messages

When you prepare or burn a disc, DVD Architect™ Pro software checks to make sure your project is compliant with the DVD or Blu-ray Disc specification. Any problems are displayed on the Review Messages page of the prepare or burn wizard. Review the message list and make any necessary adjustments.

Warning messages are marked with a yellow warning sign . You can burn a valid disc without resolving these issues.

DVD scripts are not compatible with Blu-ray Disc

Your project contains one or more DVD scripts. DVD scripts do not work on Blu-ray Disc and will be ignored in your project. You can delete them using the DVD Scripts window. For more information, see "[The DVD Scripts window](#)" on page 33.

Jacket picture is not supported on Blu-ray Disc

The jacket picture feature is not supported in Blu-ray Disc projects. The jacket picture file you specified in Project Properties will be ignored. You can delete your selection in the Jacket picture box on the Disc Properties tab of the Project Properties dialog by clicking the Clear Media button . For more information, see "[Setting project properties](#)" on page 106.

One or more buttons is outside the action safe area

When an object is outside the safe area, it is likely to be clipped when viewed on a television.

Navigate to the page and move the object as necessary. For more information, see "[Arranging and moving menu objects](#)" on page 173.



To display or hide safe area borders in the workspace, choose Workspace Overlays from the View menu and then choose Show Title Safe Area or Show Action Safe Area from the submenu. Safe areas are displayed as borders around your video to represent the visible areas for action and titles. The outer border marks the area that will be visible on a television screen, and the inner border is the suggested area for titles.

One or more buttons on a menu are broken

The destination for one or more buttons on the specified menu's is invalid.

This can occur when you delete items from your project or add empty buttons to menus.

1. Navigate to the menu with the broken action.
2. Select a button.

3. Click the  button next to the Button Properties heading to expand the Button Properties controls.
4. Click the  button next to the Action heading to expand the controls.
5. If the Destination drop-down list displays Broken Link, choose a new setting from the drop-down list to resolve the broken link.
6. Repeat steps 2 through 5 for each button on the menu.

For more information, see "[Button Properties](#)" on page 44.

One or more chapter markers are too close

You can create markers that are less than one second apart by importing markers or by moving a movie's in/out points too close to a marker.

Navigate to the movie and adjust markers or in/out points before burning. For more information, see "[Adding chapter markers](#)" on page 202.

One or more menu links are off screen

This warning indicates that a button or text box is at least 1 pixel off screen.

Navigate to the page and move the link as necessary. For more information, see "[Arranging and moving menu objects](#)" on page 173.



To display or hide safe area borders in the workspace, choose Workspace Overlays from the View menu and then choose Show Title Safe Area or Show Action Safe Area from the submenu. Safe areas are displayed as borders around your video to represent the visible areas for action and titles. The outer border marks the area that will be visible on a television screen, and the inner border is the suggested area for titles.

One or more slides in compilation are too close for chapter markers

Chapter markers must be one second apart. If a picture or song/video duration is less than one second, chapter markers cannot be created.

If your item is a picture, navigate to the picture compilation and adjust your picture duration. For more information, see "[Picture compilations](#)" on page 192.

If your item is a song or video, perform one of the following actions:

- Navigate to the music/video compilation and change the song or video. For more information, see "[Music/video compilations](#)" on page 186.
- Use an audio or video editing application to adjust the duration of your media file. The media file is automatically updated in DVD Architect.

Region coding is not currently supported on Blu-ray Disc

Region coding is not currently supported in Blu-ray Disc projects. The region codes you specified in Project Properties will be ignored, and your Blu-ray Disc will be accessible in all regions. You can change your region code selections by clicking the Regions button in the Project Properties dialog, clicking in the All regions box, and choosing Yes from the drop-down list. For more information, see "[Setting project properties](#)" on page 106.

The audio will be recompressed

Audio in your project is not in the proper format and will be recompressed during disc preparation.

For more information about the audio formats that DVD Architect can support without recompression, see "[Rendering files for your project](#)" on page 98. If you're using a supported format and still see this message, use the Optimize Disc dialog to choose a specific audio format instead of the Automatic setting. For more information, see "[Optimizing your project](#)" on page 119.

The end action of a title is broken

The link for the specified title's end action is broken.

This can occur when you delete items from your project. For example, if the end action of a title is set to link to menu two, the title's end action will be broken if you delete menu two from your project.

1. Navigate to the title with the broken action and click the  button next to the Media Properties heading to expand the Media Properties controls.
2. Click the  button next to the End Action button to expand the controls.
3. Choose a new setting from the Destination drop-down list to resolve the broken link.

For more information, see "[Media Properties](#)" on page 67.

The estimated size of the project is larger than the default space available on media

There may not be enough space available on your disc to burn your project.

You can use the Optimize Disc dialog to fine-tune your recompression settings or use the Project Overview window to delete assets from the project.

The Target media size (GB) drop-down list on the Disc Properties tab of the Project Properties dialog determines the amount of space the application uses to calculate the space available on the disc.

For more information, see "[Optimizing your project](#)" on page 119 and "[Setting project properties](#)" on page 106.

The estimated total size of all menus is close to the maximum

The total size of all menus cannot exceed 1 GB. Your project's estimated menu size is close to the limit, and your project may fail during preparation.

Deleting background images and audio from your menus may help you conserve space. For more information, see "[Menu Page Properties](#)" on page 55.

The extra content folder is invalid

The Extras folder specified on the Disc Properties page in the Project Properties dialog does not exist.

This error can occur if you move, delete, or rename the folder after setting your project properties. For more information, see "[Setting project properties](#)" on page 106.

The loop length of a menu is shorter than the minimum recommended length

The length of a menu in your project is shorter than the recommended length of five seconds when looping is enabled.

Navigate to the menu and expand the Menu Page Properties controls. Perform one of the following procedures to resolve the error:

- Choose Auto calculate from the Menu length drop-down list.
- Choose Specify from the Menu length drop-down list and type a different value in the Length box.
- Change the menu's end action to Hold.

For more information, see "[Menu Page Properties](#)" on page 55.

The menu or title is orphaned and not reachable

This can occur when you add a menu, video, picture compilation, or music/video compilation that is not linked.

1. Navigate to the menu from which you want to link to the menu or title.
2. From the Insert menu, choose Empty Button.
3. Click the  button next to the Button Properties heading to expand the Button Properties controls.
4. Click the  button next to the Action heading to expand the controls.
5. Choose the orphaned menu or title from the Destination drop-down list.

For more information, see "[Button Properties](#)" on page 44.

The number of chapters is more than the maximum

You can have no more than 99 chapter markers in each title in a DVD project. You can have no more than 255 chapter markers in each title in a Blu-ray Disc project.

Navigate to the movie and delete markers before burning. For more information, see "[Single-movie discs and titles](#)" on page 202.

The overall bit rate is greater than 28 Mbps

The overall bit rate of the specified file is too high for burning Blu-ray onto a DVD. The overall bit rate includes video, audio, and subtitles.

If your project's target media size is 25 or 50 GB and you choose to continue, your title may not play properly in some players. If your project's target media size is 4.7 or 8.5 GB, you must adjust individual bit rates for video and audio before you can continue with the disc preparation and burning process.

You can adjust individual bit rates for video and audio from the Project Properties dialog. For more information, see "[Setting project properties](#)" on page 106.

The play mode for playlist is set to random

The play mode the specified playlist is set to Random. Random playlists are not supported for Blu-ray Discs. This playlist will be played sequentially.

The script contains a broken link

The specified script contains a Link command with a broken link destination.

To edit a script's properties, perform the following actions:

1. If the Script Properties window isn't already visible, choose Properties from the View menu.
2. Double-click the specified DVD script in the Project Overview window (or choose the script from the drop-down list at the top of the DVD Scripts window) to open the script.
3. In the DVD Scripts window, review the script statements for a Link command that displays as **'Broken link'**. Click the statement.
4. In the Script Properties pane, click the Destination box and choose a title or menu from the drop-down list to which you want to link.

For more information, see "[Script Properties](#)" on page 91.

The script contains a GotoLabel command which points to an invalid label

The specified script contains a GotoLabel command which points to an invalid label in the script.

To edit a script's properties, perform the following actions:

1. If the Script Properties window isn't already visible, choose Properties from the View menu.
2. Double-click the specified DVD script in the Project Overview window (or choose the script from the drop-down list at the top of the DVD Scripts window) to open the script.

3. In the DVD Scripts window, review the script statements for a GotoLabel command that displays as **'Invalid label'**. Click the statement.
4. In the Script Properties pane, click the Label box and choose a label from the drop-down list.



Label statements can only be used to link within a script; links from one script to a label in another script are not supported.

For more information, see ["Script Properties"](#) on page 91.

The video has a length of zero

You cannot burn a video with a length of zero to a disc.

Adjust the video's Set In  and Set Out  points as necessary. For more information, see ["Single-movie discs and titles"](#) on page 202.

The video will be recompressed

Video in your project is not in the proper format and will be recompressed during disc preparation.

For more information about the audio formats that DVD Architect software can support without recompression, see ["Rendering files for your project"](#) on page 98. If you're using a supported format and see this message, use the Optimize Disc dialog to choose a specific video format instead of the Automatic setting. For more information, see ["Optimizing your project"](#) on page 119.

There are more than X slides in compilation

Each title on your DVD can have no more than 99 chapter markers. Each title on your Blu-ray Disc can have no more than 255 chapter markers.

If your compilation contains additional pictures or songs/videos beyond these limits, you can still burn your project, but chapter markers will be created only for the first 99 or 255 items.

Navigate to the picture or music/video compilation and delete items as necessary. For more information, see ["Picture compilations"](#) on page 192 or ["Music/video compilations"](#) on page 186.

There are no slides in compilation

A picture or music/video compilation must have at least one picture or song/video.

Navigate to the picture or music/video compilation and add pictures or songs/videos as necessary. For more information, see ["Picture compilations"](#) on page 192 or ["Music/video compilations"](#) on page 186.

There may not be enough space in the temporary files folder for preparing the disc

There may not be enough space in your temporary files folder to prepare your project. You can continue, but preparation may fail. You can specify a different folder on the Burning tab of the

Preferences dialog.

Choose a folder on the drive where you have the most available space.

Informational Messages

When you prepare or burn a disc, DVD Architect™ Pro software checks to make sure your project is compliant with the DVD or Blu-ray Disc specification. Any problems are displayed on the Review Messages page of the prepare or burn wizard. Review the message list and make any necessary adjustments.

Informational messages are marked with a blue information sign . You can burn a valid disc without resolving these issues.

One or more text objects are outside the title safe area

When a text object is outside the safe area, it is likely to be clipped when viewed on a television.

Navigate to the page and move the text as necessary. For more information, see "[Adding and editing text](#)" on page 154.

 To display or hide safe area borders in the workspace, choose Workspace Overlays from the View menu and then choose Show Title Safe Area or Show Action Safe Area from the submenu. Safe areas are displayed as borders around your video to represent the visible areas for action and titles. The outer border marks the area that will be visible on a television screen, and the inner border is the suggested area for titles.

Some video angles in the title have no events on the track

The title listed in this error message has an additional video track that has no events.

Navigate to the title, select the Timeline window, and delete the track or add events.

For information about adding alternate video angles, see "[Adding video tracks](#)" on page 134.

The end action uses the most recent menu command before a menu is reached

The end button action for a title is set to display the most recently displayed menu before a menu is displayed. The Menu button will navigate to the top menu or stop if there are no menus.

1. Navigate to the title.
2. Click the  button next to the Media Properties heading to expand the Media Properties controls.
3. Click the  button next to the End Action heading to expand the controls.
4. Choose a new setting from the Destination drop-down list.

For more information, see "[Media Properties](#)" on page 67.

The remote button action uses the most recent menu command before a menu has been reached

The remote button action for a title is set to display the most recently displayed menu before a menu is displayed yet. The Menu button will navigate to the top menu or stop if there are no menus.

1. Navigate to the title.
2. Click the  button next to the Media Properties heading to expand the Media Properties controls.
3. Click the  button next to the Remote Buttons heading to expand the controls.
4. Click the  button next to the Menu heading to expand the controls.
5. Choose a new setting from the Destination drop-down list.

For more information, see "[Media Properties](#)" on page 67.

Glossary

A

Adaptive Delta Pulse Code Modulation (ADPCM)

A method of compressing audio data. Although the theory for compression using ADPCM is standard, there are many different algorithms employed. For example, Microsoft's ADPCM algorithm is not compatible with the International Multimedia Association's (IMA) approved ADPCM.

A-Law

A compounded compression algorithm for voice signals defined by the Geneva Recommendations (G.711). The G.711 recommendation defines A-Law as a method of encoding 16-bit PCM signals into a non-linear 8-bit format. The algorithm is commonly used in United States' telecommunications. A-Law is very similar to μ -Law, however, each uses a slightly different coder and decoder.

Alpha Channel

The alpha channel determines how transparency is handled in a file. TGA and TIF image files commonly have an Alpha channel that is automatically detected by DVD Architect™ Pro software.

Analog

When discussing audio, this term refers to a method of reproducing a sound wave with voltage fluctuations that are analogous to the pressure fluctuations of the sound wave. This is different from digital recording in that these fluctuations are infinitely varying rather than discrete changes at sample time. See [Quantization](#).

Audio Compression Manager (ACM)

The Audio Compression Manager, from Microsoft, is a standard interface for audio compression and signal processing for Windows. The ACM can be used by Windows programs to compress and decompress .wav files.

B

Bit

A bit is the most elementary unit in digital systems. Its value can only be 1 or 0, corresponding to a voltage in an electronic circuit. Bits are used to represent values in the binary numbering system. As an example, the 8-bit binary number 10011010 represents the unsigned value of 154 in the decimal system. In digital sampling, a binary number is used to store individual sound levels, called samples.

Bit Depth

The number of bits used to represent a single sample. Higher values will increase the quality of the playback and any recordings that you make. While 8-bit samples take up less memory (and hard disk space), they are inherently noisier than 16 or 24-bit samples.

Breakpoint

Breakpoints are useful for debugging scripts. In preview mode, breakpoints suspend playback and display the debugger area in the lower-left corner of the preview window, allowing you to step through the script in a specific location and then resume playback.

Brightness

Adjusting brightness adds or subtracts values from the color channels in an image to make the image lighter or darker. The maximum brightness setting adds 255 (pure white), and the minimum setting adds 0 (pure black).

Byte

Refers to a set of 8 bits. An 8-bit sample requires one byte of memory to store, while a 16-bit sample takes two bytes of memory to store.

C

Clipboard

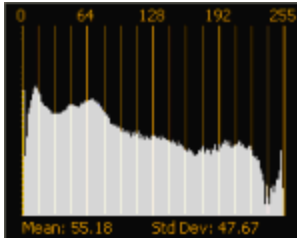
The clipboard is where data that you have cut or copied in DVD Architect software is stored. You can then paste the data back into DVD Architect software at a different location or paste it into other applications, such as Microsoft Word, or another instance of DVD Architect software. Some data, such as audio, can not be pasted into applications such as Microsoft Word or Notepad, but the text data from the Edit Details window can be pasted. This allows you to then print or format the data.

CODEC

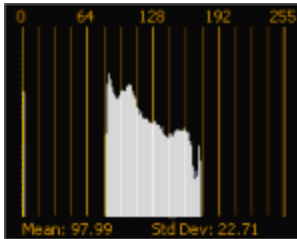
An acronym for Coder/Decoder. Commonly used when working with data compression.

Contrast

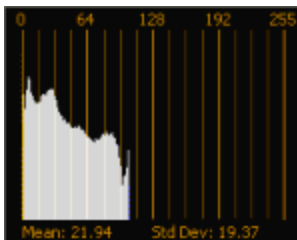
Adjusting contrast multiplies color values in an image to stretch the existing color channel values across a broader or narrower portion of the spectrum. The contrast center determines the anchor point for stretching.



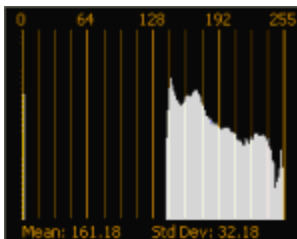
Histogram of original image.



Contrast decreased with a contrast center of 0.5: the histogram is squeezed into a narrower portion of the spectrum anchored from the center of the graph.



Contrast decreased with a contrast center of 0.0: the histogram is squeezed into a narrower portion of the spectrum anchored at the left edge of the graph.



Contrast decreased with a contrast center of 1.0: the histogram is squeezed into a narrower portion of the spectrum anchored at the right edge of the graph.

D

Device Driver

A program that enables Windows to connect different hardware and software. For example, a sound card device driver is used by Windows software to control sound card recording and playback.

Drag and Drop

A quick way to perform certain operations using the mouse in DVD Architect software. To drag and drop, you click and hold a highlighted selection, drag it (hold the left-mouse button down and move the mouse) and drop it (let go of the mouse button) at another position on the screen.

E

Event

An event is an occurrence of a media file on the timeline.

F

Frame Rate (Audio)

Audio uses frame rates only for the purposes of syncing to video or other audio. In the latter case, the rate of 30 non-drop is typically used. In the former case 30 drop is usually used.

Frame Rate (Video)

The speed at which individual images in the video are displayed on the screen during playback. A faster frame rate results in smoother motion in the video. The television frame rate in the US (NTSC) is 29.97 frames per second (fps). In many parts of Europe and Japan, the television standard is PAL at 25 fps.

G

Gamma

Determines the brightness of the video and is used to compensate for differences between the source and output video and sometimes needs to be calibrated to match the source or destination. Higher gamma values result in lighter or brighter video as displayed on your computer's monitor.

I

Inverse Telecine (IVTC)

Telecine is the process of converting 24 fps (cinema) source to 30 fps video (television) by adding *pulldown* fields. Inverse telecine, then, is the process of converting 30 fps (television) video to 24 fps (cinema) by removing pulldown.

M

Markers

Markers mark different sections of your project. Markers are saved with your DVD Architect project file and can also be saved to the media file.

Marker Type	Description
Scene/chapter markers	Used as navigation points for a video file as well as for linking to points in a video using end actions or to automatically create scene selection menus using the Insert > Scene Selection command.
Chapter markers	Used as navigation points for a video file. Ignored when creating scene selection menus using the Insert > Scene Selection command.
Buttons-on-video markers	Used to add interactivity to your project. These markers are ignored by the remote control's previous/next chapter buttons.

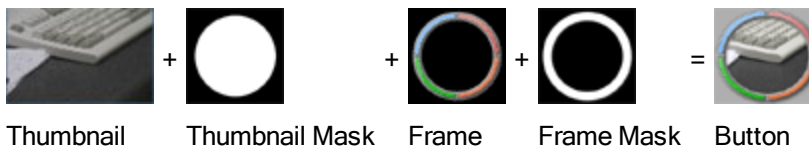
Mask

A mask determines which portion of an image will be visible. Masks in DVD Architect software use the value of the red channel to determine transparency: 0 is transparent and 255 is opaque.

In the following example, the black portions of the mask image have a red value of 0 (black: R=0, G=0, and B=0) and will cause the corresponding portions of the thumbnail image to be transparent. The white portions of the mask have a red value of 255 (white: R=255, G=255, and B=255) and will cause the corresponding portions of the thumbnail to be opaque. Intermediate red values are partially transparent.



In the following example, the black portions of the thumbnail mask make the corresponding portions of the thumbnail transparent so only a circular portion of the thumbnail is visible. The black portions of the frame mask make the corresponding portions of the frame image transparent so only the ring is visible.



N

Nyquist Frequency

The Nyquist Frequency (or Nyquist Rate) is one half of the sample rate and represents the highest frequency that can be recorded using the sample rate without aliasing. For example, the Nyquist Frequency of 44,100 Hz is 22,050 Hz. Any frequencies higher than 22,050 Hz will produce aliasing distortion in the sample if no anti-aliasing filter is used while recording.

P

Pan

To place a mono or stereo sound source perceptually between two or more speakers.

Peak Data File

The file created when a file is opened for the first time. This file stores the information regarding the graphic display of the waveform so that opening a file is almost instantaneous in direct edit mode. This file is stored in the directory that the file resides in and has a .sfk extension. If this file is not in the same directory as the file, or is deleted, it will be recalculated the next time you open the file.

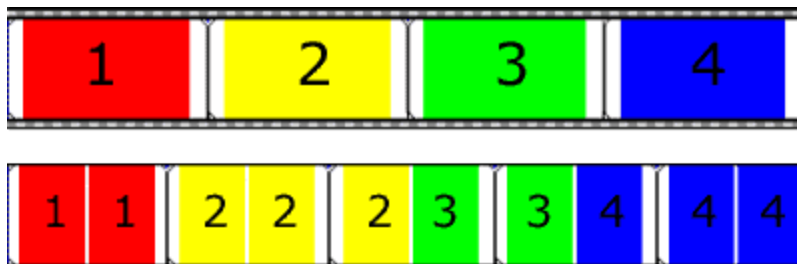
Pixel Aspect

The pixel aspect determines whether the pixels are square (1.0) which refers to computers, or rectangular (settings other than 1.000) which typically refers to televisions. The pixel aspect ratio is unrelated to the frame's aspect ratio.

Pulldown

In **telecine** conversion, fields are added to convert 24 fps film to 30 fps video.

In 2-3 pulldown, for example, the first frame is scanned into two fields, the second frame is scanned into three fields, and so on for the duration of the film. 2-3 pulldown is the standard for NTSC broadcasts of 24p material. Use 2-3 pulldown when burning a disc, but not when you intend to use the rendered video in a Vegas Pro project. Removing 2-3 pulldown is inefficient because the pulldown fields that are created for frame 3 span two frames:



24 fps film (top) and resulting NTSC video with 2-3 pulldown fields (bottom)

Use 2-3-3-2 pulldown when you plan to use your rendered video as source media. When removing 2-3-3-2 pulldown, Frame three is discarded, and the pulldown fields in the remaining frames are merged:

Q

Quantization

The process by which measurements are rounded to discrete values. Specifically with respect to audio, quantization is a function of the analog to digital conversion process. The continuous variation of the voltages of a analog audio signal are quantized to discrete amplitude values represented by digital, binary numbers. The number of bits available to describe these values determines the resolution or accuracy of quantization. For example, if you have 8-bit analog to digital converters, the varying analog voltage must be quantized to 1 of 256 discrete values; a 16-bit converter has 65,536 values.

R

Ruler Tags

Small tab-shaped controls above the time ruler that represent the location of markers and loop points in the timeline.

Ruler, Time

The time ruler is the area on the timeline above the tracks that shows the horizontal axis units.

S

Sample Rate

The sample rate (also referred to as the sampling rate or sampling frequency) is the number of samples per second used to store a sound. High sample rates, such as 44,100 Hz provide higher fidelity than lower sample rates, such as 11,025 Hz. However, more storage space is required when using higher sample rates.

Shortcut Menu

A context-sensitive menu that appears when you right-click on certain areas of the screen. The functions available in the shortcut menu depend on the object being clicked on as well as the state of the program. As with any menu, you can select an item from the shortcut menu to perform an operation. Shortcut menus are used frequently in DVD Architect software for quick access to many commands. An example of a shortcut menu can be found by right-clicking on any waveform display in a data window. For information on the available DVD Architect software shortcuts, click [here](#).

Society of Motion Picture and Television Engineers (SMPTE)

SMPTE timecode is used to synchronize time between devices. The timecode is calculated in Hours:Minutes:Second:Frames, where Frames are fractions of a second based on the frame rate. Frame rates for SMPTE timecode are 24, 25, 29.97 and 30 frames per second.

Sound Card

The sound card is the audio interface between your computer and the outside world. It is responsible for converting analog signals to digital and vice versa. DVD Architect software will work with any Windows-compatible sound card.

Stereo

Mixer implementation that includes two discrete channels.

Surround

Mixer implementation that includes six discrete channels.

T

Telecine

The process of creating 30 fps video (television) from 24 fps film (cinema). See [inverse telecine](#) and [pulldown](#).

Time Format

The format by which DVD Architect software displays the time ruler and selection times. These include Time, Seconds, Frames, and all standard SMPTE frame rates.

Title

A *title* in a disc can be any video, music/video compilation, or picture compilation. In the Project Overview window, a title is represented by one of the following icons:

	Video Title
	Picture Compilation
	Music/Video Compilation

Track

A discrete timeline for audio data. Audio events sit on audio tracks and determine when a sound starts and stops. Multiple audio tracks are mixed together to give you a composite sound that you hear through your speakers.

U

μ-Law

μ-Law (mu-Law) is a companded compression algorithm for voice signals defined by the Geneva Recommendations (G.711). The G.711 recommendation defines μ-Law as a method of encoding 16-bit PCM signals into a non-linear 8-bit format. The algorithm is commonly used in European and Asian telecommunications. μ-Law is very similar to A-Law, however, each uses a slightly different coder and decoder.

Undo Buffer

This is the temporary file created before you do any processing to a project. This undo buffer allows the ability to rewrite previous versions of the project if you decide you do not like changes you have made to the project. This undo buffer is erased when the file is closed or the Clear Edit History command is invoked.

Undo/Redo

These commands allow you to change a project back to a previous state, when you do not like the changes you have made, or reapply the changes after you have undone them. The ability to Undo/Redo is only limited by the size of your hard drive. See [Undo Buffer](#).

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