

2

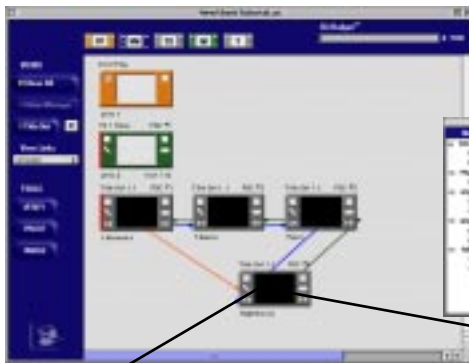
Creating a Simple Project

Session Goal: *To learn how to author a simple project by creating a basic layout, adding audio and video, and playing back the project.*

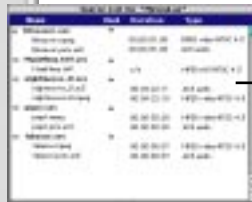
Completion Time: *About 30 minutes.*

Files Needed: *LifeSaver.qt, NightMoves.qt, Pepsi.qt and Tabasco.qt*

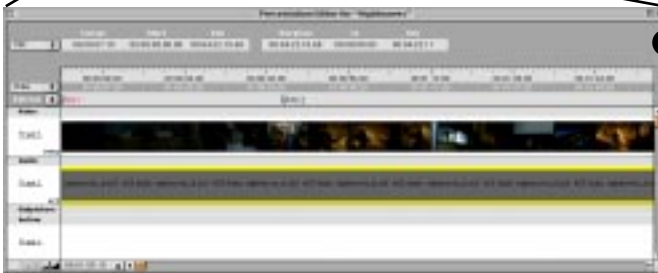
Lesson Two at a Glance



Create a basic layout in the Layout window.



Play back the project using PROOF's onscreen remote control.



Use the Presentation Editor to add audio and video tracks to four different PGCs.

Getting Started

In this lesson you will create a simple project using the audio and video files provided on the Tutorial CD-ROM. To copy the tutorial files from the CD-ROM to the Media Drive:

- 1** Insert the Tutorial CD-ROM into the CD-ROM drive.
- 2** Copy the folder labeled, **Demo_Material**, to the external Media Drive. You must have at least 750 MB of available space. The demo material includes audio and video that has already been encoded (.MPEG and .AC3 files). These are very large files and copying them to the Media Drive may take up to 20 minutes.



Note: Make sure your DVD Creator system is configured properly as explained in the *DVD Creator User Guide*, Chapter 1.

Creating a New Project

For this tutorial, you will do the following:

- Create a basic layout
- Import audio and video
- Add audio and video to a PGC
- Play back the audio and video (proofing)
- Add and link PGCs
- Add audio and video to the new PGCs
- Add entry points (chapter points)
- Proof the entry points

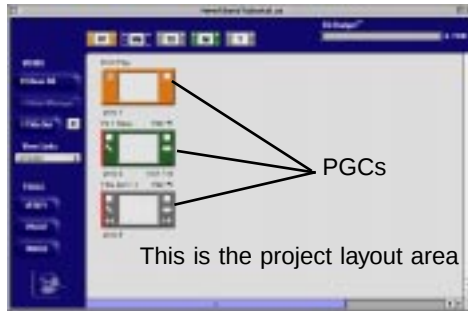
Creating a Basic Layout

- 1** Launch the authoring tool from the DVD Creator Launcher.
- 2** In the AUTHOR window, click **New Project**.
- 3** In the Save As window, do the following:
 - Locate the external media drive.
 - Type **Lesson2.as** as the file name.
 - Click **Save**.
- 4** In the Project Planner do the following:
 - Deselect “Would you like a Video Manager menu?”
 - Select “Would you like Title Set menus?” and click **Finish**.

Project Planner Options

Planner Option	Description
What kind of DVD are you making?	DVD Creator sets different parameters depending on whether you are making a movie, a video, etc.
Which side is this project for?	An entire DVD project cannot span both sides of a disc. Select the side this project is intended for. Note - This is different than layers, projects can span two layers.
Volume	If you have more than one DVD disc in a multi-volume set, give it a volume number.
Would you like a First Play program chain?	The First Play PGC tells a DVD player what to play first. If there is no first play PGC, when you insert a DVD disc into a player, nothing happens until you use the remote control.
Would you like a Video Manager menu?	The Video Manager menu is typically used as a main menu to keep track of multiple Title Sets. Each Title Set has its own set of menus. This project only uses one Title Set so we do not need a Video Manager menu.
Would you like Title Set Menus?	A Title Set menu is the root menu for all titles within a Title Set.
How many title sets would you like?	The tutorial contains only one Title Set. You can have up to 99 Titles per disc and every Title Set must have at least one Title. So, if you have 99 Titles in one Title Set, you can only have one Title Set on a disc. Conversely, if you have 1 Title in each Title Set, you can have 99 Title Sets on a disc.

Based on the project planner options you selected, the Layout window appears with a First Play PGC, a Title Set Menu object, and a Title Set object.



PGCs (Presentation Objects)

The building blocks of DVD titles are **PGCs** (also known as presentation objects or program chains). PGCs are placeholders for display information. They typically contain audio, video, subpictures, and navigation commands. There are five different types of PGC icons (First Play,

Video Manager Menu, Title Set Menu, and Title) that have different functions depending on what *domain* they reside in.

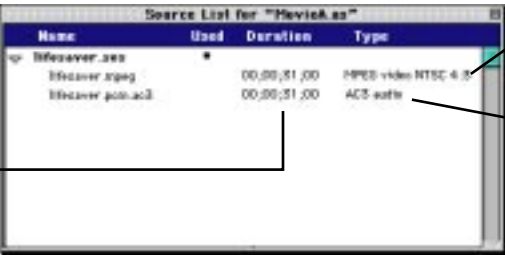
For more information on PGCs and domains, see the *DVD Creator User Guide*.

Importing Audio and Video

Now that you have created PGCs, the next step is to import an audio and video clip to place into a PGC.

- 1 Drag and drop **lifesaver.qt** from the media drive into the Source List.

The length of the files.



Name	Used	Duration	Type
lifesaver.asx	*		
lifesaver.mpeg		00:00:01:00	MPEG video NTSC 4:3
lifesaver.pcm.ac3		00:00:01:00	AC3 audio

The MPEG file is the video track.

The AC3 file is the Dolby Digital audio track.

All media assets, audio, video, and graphics, are imported via the Source List. The Source List is, therefore, a database of all a project's assets.

Adding Audio and Video to a PGC

Now that you have imported an audio and video file, it is time to place them into a PGC.

- 1 In the Layout Window, double-click the PGC, *Title Set 1:1 PGC #1*.

Double-click the middle of the Title Set 1:1 icon to display the Presentation Editor.



The Presentation Editor opens – this is where you add audio, video, and subpictures within a PGC.

- 2 Drag and drop the **lifesaver.qt.mpeg** video file from the Source List to the Presentation Editor's Video track. Thumbnails representing the video file display in the video track.



Drag **lifesaver.qt.mpeg** from the Source List to the video track.

- 3 Drag and drop the **lifesaver.pcm.ac3** audio file from the Source List to the Presentation Editor's audio track.



Figure 2-1 Presentation Editor displaying both video and audio streams.

- 4 Close the Presentation Editor by clicking the box in the upper left-hand corner. The Layout window appears with a thumbnail of the video inside the Title Set 1:1 icon.



Note: When you add video to a PGC, the first frame of video displays in the center of the object in the Layout window. The video clip you just added begins with a fade from black, so the frame that appears in the Layout window is simply black.

- 5 Save the Project (⌘+S).

Playing Back the Audio and Video (Proofing)

Now that you have added some material to a PGC, you can play it back to see what it looks like.

- 1 In the Layout window, select the PGC, *Title Set 1:1 PGC #1*, and click **Project**.



The proofing tool launches, and after several seconds begin playing the video and audio streams contained in the PGC.

- 2
- Use the remote control to navigate through the title. It has all of the features and functionality of a DVD player's remote control.



The Navigation State window displays the status of both *System Parameters* and *General Parameters*. System Parameters display settings and controls found within the DVD player (such as the default language), while General Parameters are author-defined variables (to be used for such things as keeping a game score, tracking user interactivity, and more complex calculations).

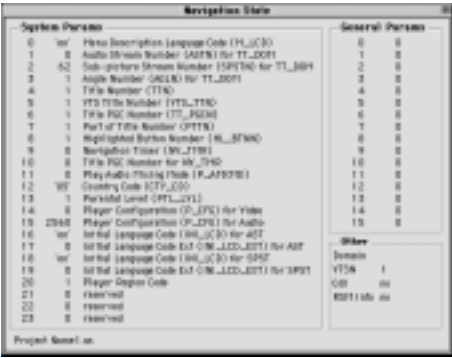


Figure 2-2 Navigation State window.

- 3 When you are done, click **Power** to close the proofing tool.

Adding and Linking PGCs

Now that you understand the basics of creating a title (designing a layout and adding audio and video to a PGC), you are ready to create a more complex layout by adding more PGCs with additional audio and video tracks.

- 1 Click and drag from the right arrow of *Title Set 1:1 PGC #1* to an empty space in the layout window to create a **Next** link and a new PGC, *Title Set 1:1 PGC #2*.



The green line indicates a Next Link from PGC #1.

Types of Links - Next, Previous, and Return

Linking PGCs establishes the order in which they will play back. There are three types of links:

- **Next** - When a viewer presses the **Next** or **Skip** button on a DVD player remote control, the PGC attached by a Next link plays next.
- **Previous** - When a viewer presses the **Previous** button on a DVD player remote
- **Return** - When a viewer presses the **Return** button on a DVD player remote control, the PGC attached by a Return link plays next.

- 2 Click and drag the left arrow of PGC #2 to PGC #1 to create a **Previous** link.



- 3 Click and drag from PGC #2's right arrow and release. A new PGC, *Title Set 1:1 PGC #3*, appears with a green Next Link drawn.
- 4 Click and drag from PGC #3's right arrow and release. Now you should have four PGCs with Next Links connecting them together.

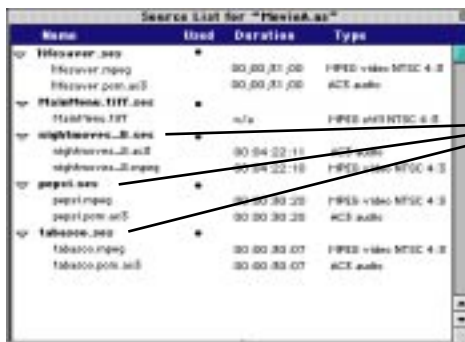
- 5 Add Previous links between PGC #4 and PGC #3, and PGC #3 and PGC #2.



Add Audio and Video to the New PGCs

Now you will add audio and video to each of the new, linked PGCs.

- 1 Drag the **nightmoves_8.qt**, **pepsi.qt** and **tabasco.qt** files from the desktop to the Source list.



Add these three files to the Source List.

DVD Creator adds .ses (session) to the file names.

- 2 Double-click the middle of PGC #2 in the Layout window to display the Presentation Editor.
- 3 Drag **tabasco.qt.mpeg** from the Source List to the video track area and **tabasco.pcm.ac3** from the Source List to the audio track area of the Presentation Editor.



Note: Or, you can also try dragging the .ses file directly into the track header area. This will place both the video and audio files (contained in the .ses file) into the Presentation Editor at the same time.

- 4 Click the box in the upper left-hand corner of the Presentation Editor to close the window and return to the Layout window.
- 5 Repeat steps 2 through 4 to add the **pepsi** audio and video clips to PGC #3 and the **nightmoves** audio and video clips to PGC #4.

When you are done, the Layout window should look like this:

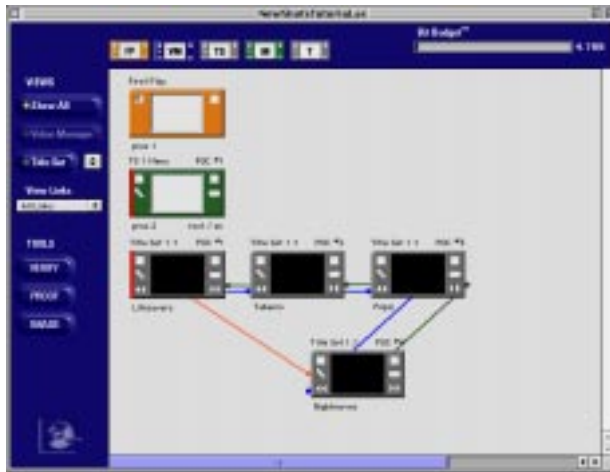


- 6 Click the label under PGC#1, **pres 3**, to highlight and type **LifeSavers**. Press Tab to move to the next PGC label.

7 Repeat Step 6 with the other three Title PGCs:

- Rename PGC#4 to **Tabasco**
- Rename PGC#5 to **Pepsi**
- Rename PGC#6 to **Nightmoves**

This will make it easier to keep track of the layout.



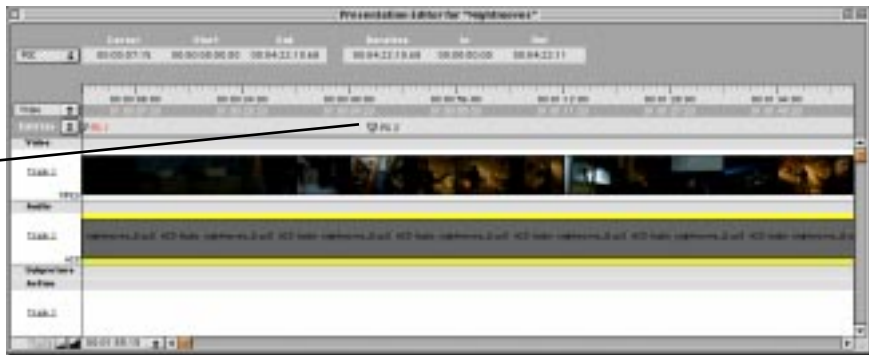
8 Save the project (⌘+S).

Adding Entry Points (Chapter Points)

Entry points are markers within a PGC that allow viewers to jump to certain points within a video stream using the **Next** and **Previous** buttons on the remote control. (Entry points can also be used as Chapter Points.)

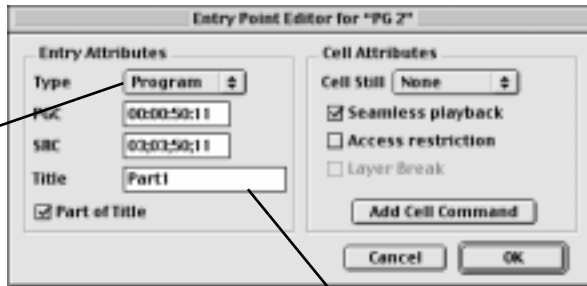
- 1** Double-click the Nightmoves PGC in the Layout window to display the Presentation Editor.
- 2** Double-click just above the video track in the Entry Point area. This creates an entry point.

Double-click in this area to create an entry point.



3 Double-click the entry point.

By default, the entry point is defined as a **Program** and part of a title.



You can name the entry point for reference purposes (the name appears next to the entry point in the Presentation Editor).

Not only do entry points provide “jump to” points in a title, but they also separate the video streams into **Programs** and **Cells**.

Entry Points - Programs vs. Cells

Defining an entry point as a **cell** means that navigation to this specific location can only be achieved by using the “Link CN” command. Also, playing through this point will *not* increment the chapter counter on the DVD player.

Defining an entry point as a **program** means that this point can be navigated to by using the “Link PGN” command or the “Link CN” command. Only part of Title Entry Points can increment the Chapter Display.

4 Click ok in the Entry Point Editor to close the window.

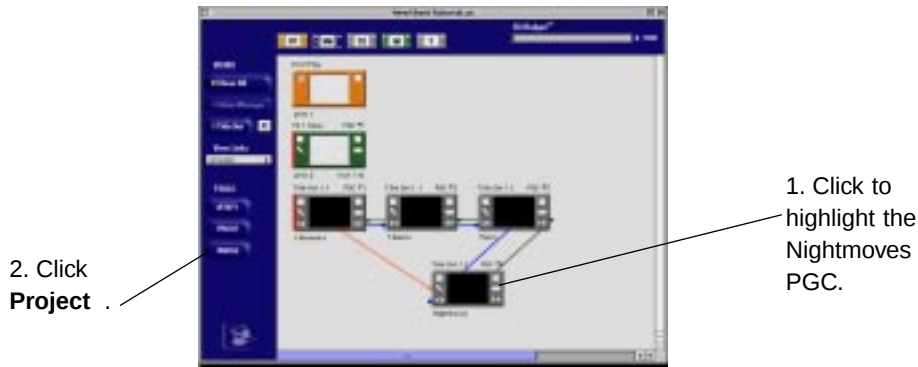
Now, define three or four more Entry Points.

5 When you are done close the Presentation Editor to return to the Layout window and save the project.

Proofing the Entry Points

Now you will use the proofing tool to check that all of the Part of Title Entry Points function as expected. Using the Next and Previous buttons on the remote control, you can move between the different entry points.

- 1 In the Layout window, select the Nightmoves PGC and click **Project**.



The proofing tool opens and plays the Nightmoves video.

- 2 Use the **Next** and **Previous** buttons on the remote control to move from entry point to entry point.
- 3 When you are done, click **Power** on the remote control to close the proofing tool.

3

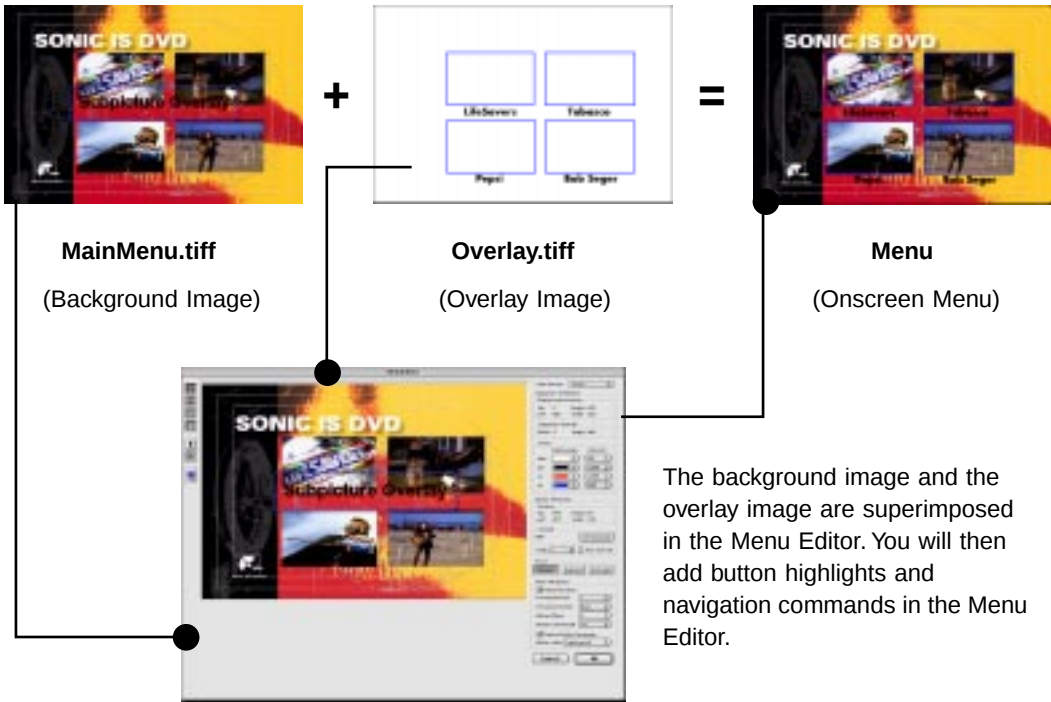
Creating Menus

Session Goal: *Add a menu to the basic DVD project created in Lesson 2 and format the project.*

Completion Time: *About 30 minutes*

Files Needed: *MainMenu.tiff, Overlay.tiff*

Lesson Three at a Glance



Creating Menus

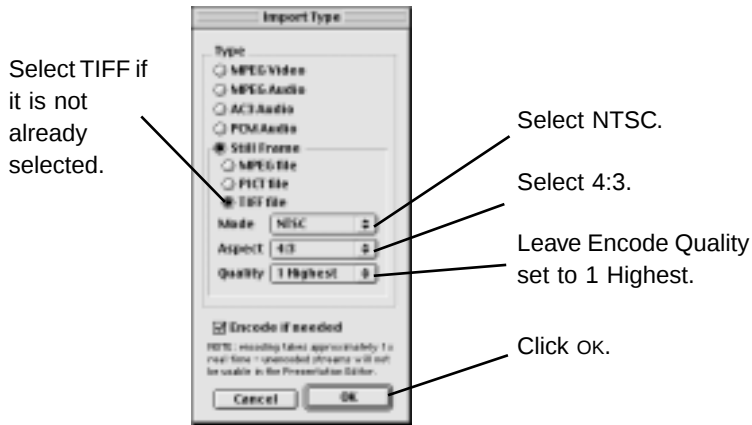
In this lesson you will create a menu that will allow viewers to select among the four PGCs created in Lesson 2. You will:

- Import the menu image (TIFF) file
- Add the menu image to a menu PGC
- Add menu buttons and selection order
- Define button colors and button families
- Assign navigation commands to buttons
- Assign button attributes

Importing the Menu Image Files

- 1** Complete Lesson 2.
- 2** If necessary, select **File > Open** and open **Lesson2.as**.
- 3** Choose **Source > Import** and open **mainmenu.tiff** located on the Media Drive.

- 4 In the Import Type window, choose the encode parameters for the graphic file.

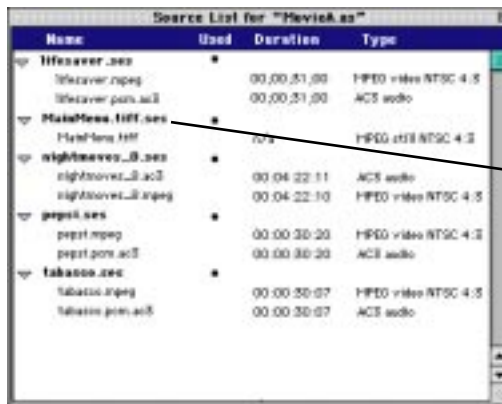


The authoring tool encodes the TIFF file into an MPEG still that can be used as a menu background image.



Note: DVD Specification can only work with MPEG-encoded images (stills and MPEG motion video).

The encoded TIFF is now listed in the Source List as an MPEG still.



The menu's background image TIFF appears in the Source List.

Adding the Menu Image files to the Project

- 1 Double-click the video area of the Menu object to display the Presentation Editor.

Double-click here to open the Presentation Editor.



- 2** Drag **MainMenu.tif** from the Source List to the Video track.

A thumbnail of the TIFF appears in the video track.

A Subpicture track for a duration of twelve frames (default length) is created.

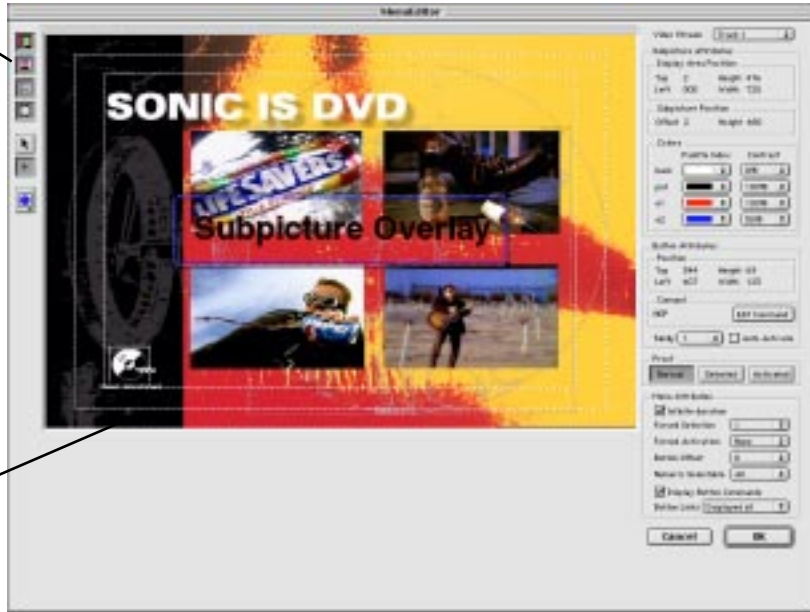


- 3** Double-click the brown subpicture track in the Presentation Editor to display the Menu Editor.

The Menu Editor appears. This is where you will add the subpicture overlay and button highlights.

The buttons in the upper left corner of the window allow you to toggle different aspects of the display on or off.

The background image TIFF displays with a default subpicture overlay in front.



- **Video Display** - Toggles the background picture on and off.



- **Subpicture Display** - Toggles the subpicture on and off.



- **Button Display** - Toggles the subpicture display area on and off.



- **Safety Zone Display** - Toggles the television safety area on and off.

- 4 Choose **Menu Editor > Select Sub-picture**.
- 5 In the Open window, locate **Overlay.tiff** on the media drive, and click **OK**.

Now the Menu Editor displays both the background and overlay TIFFs as they will look when played back on a DVD player.



Figure 3-1 Background Tiff with subpicture overlay

- 6 Display only the overlay you just imported by clicking all the display buttons except the subpicture button,  (second from the top).

Toggle off all the display buttons except the subpicture display to view the subpicture image only.



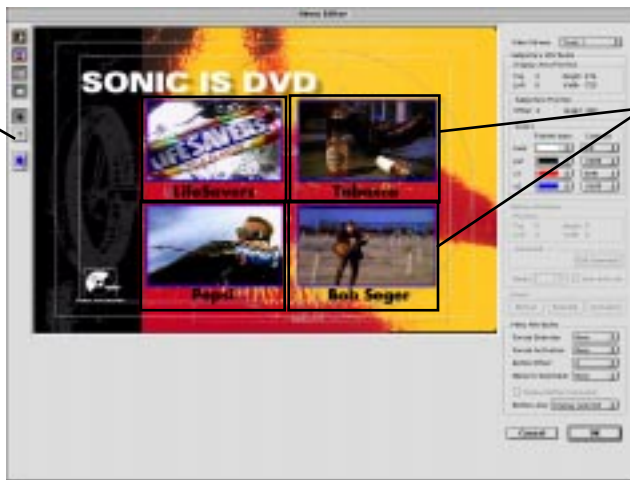
Adding Menu Buttons and Selection Order

Now that you have added the menu's background image and the subpicture overlay, you are ready to draw the button highlight areas. The button highlight areas are the selectable areas on a menu.

You will create four buttons to play back the PGCs created in Lesson 2 (one that plays the LifeSavers PGC, one that plays the Pepsi PGC, one that plays the Tabasco PGC, and one that plays the Nightmoves PGC). This involves:

- Drawing four buttons
 - Linking the buttons to the appropriate PGCs
- 1** Toggle all four display buttons back on, to display the background image, the subpicture overlay, and all the display areas.
 - 2** Click the Button tool () to draw a rectangle around the four button areas:

Click the
button
tool.



Draw four buttons, one around each picture along with its text. By including the text, you can change the selection and activation colors of the text as well as the color of the subpicture overlay's squares.

It's OK if the buttons overlap other artwork in the background image, as long as they do not overlap other parts of the subpicture overlay. When you define selection and activation colors, they affect text and images on the subpicture overlay (not the background image).

- 3 Use the Selection () tool to reposition the buttons as needed.

Now that you have drawn your buttons, you will define the order they will be highlighted (selected) when a viewer uses the arrow keys on a DVD remote control.

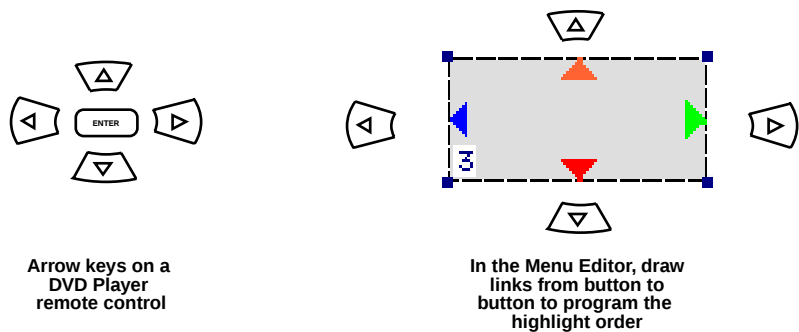
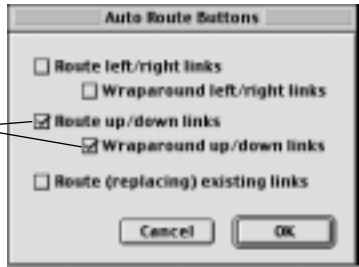


Figure 3-2 Creating button selection (highlight) order

- 4 Select **Menu Editor > Auto Route Buttons**.
- 5 In the Auto Route Buttons window, do the following:

Select to link the first and last buttons so that scrolling continues top to bottom in a circular fashion.



The buttons are now programmed so that viewers can scroll through them from top to bottom with the arrow keys on a DVD player's remote control.

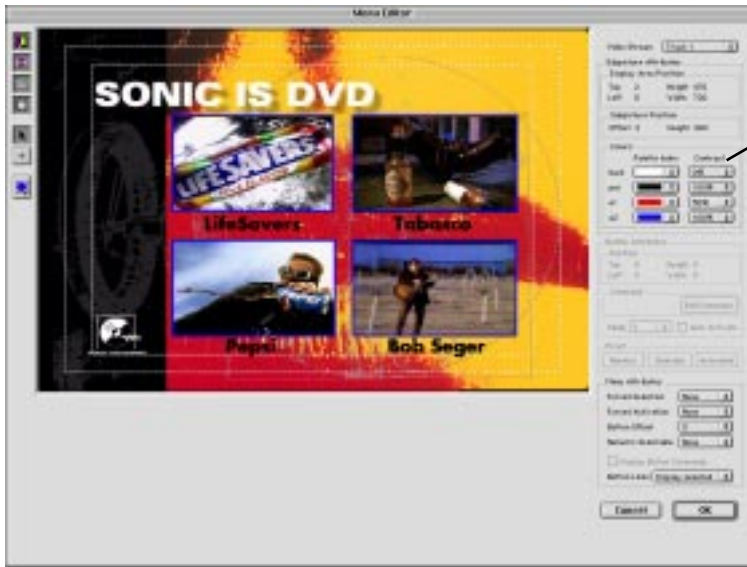
Defining Button Colors and Button Families

Now that you have defined selection movement between the menu buttons, you will define how the buttons will appear when they are selected, activated, and normal (not selected or activated).

Button families allow you to define different background, pattern, E1, and E2 colors for each button state:

- selected
- activated
- normal

Each menu can have up to 36 buttons and each button can be placed in one of the three families.



The 'Colors' section in the right column of the window allows you to change the Normal color settings for all buttons in the current family.

Background, Pattern, E1, and E2 colors

Overlay TIFFs must be created with four colors: white, black, red, and blue. These colors are mapped to specific controls within the Menu Editor:

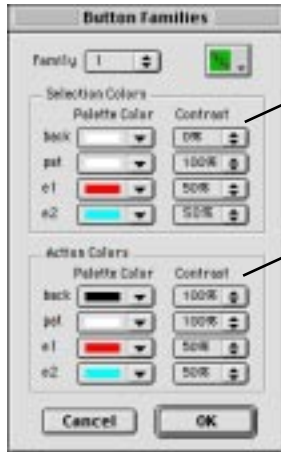
- White = Background color
- Black = Pattern
- Red = E1 (Emphasis 1)
- Blue = E2 (Emphasis 2).

After the TIFF is imported into the Menu Editor, you can change these colors using the 16-color palette in the Menu Editor.

Setting normal colors:

But first, you must set up normal colors, as shown in the following step.

- 1 Set E2 to 0 percent contrast.
- 2 **Choose Menu Editor > Edit Button Families.** The Button Families window appears.

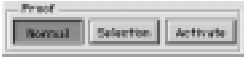


When menu buttons are **selected** onscreen, they will be highlighted with these colors.

When menu buttons are **activated** onscreen, they will be highlighted with these colors.

- 3 In the Selection Colors area, change **e2** to the dark blue that matches the **Normal** setting. Set e2's **Contrast** setting to 100%.
- 4 In the Action Colors area, set **pattern** and **e2** to white.
- 5 Click ok, and return to the main Menu Editor screen.

- Click **Normal**, **Selection**, and **Activate** in the Proof area of the Menu Editor to see how the buttons display in these different states.



How the button appears when neither selected nor activated.



How the button appears when selected.



How the button appears when activated.

Assigning Navigation Commands to Buttons

Now you will assign commands to each button, so that when activated, it will perform the correct function. In this case, we want each button to jump to a particular PGC when activated by a viewer.

- Double-click the LifeSavers button in the Menu Editor. The Command Editor displays.

2 In the Command Editor, do the following:

1. Select Jump
VTS PTT.



2. Select 1:1
#1,
"Lifesavers":PG
1. This directs
playback to the
LifeSavers
PGC. PG1
directs
playback to
Entry Point 1
within PGC #1
(LifeSavers
object).

3. Click ok.

3 Repeat steps 1 and 2 for the other buttons so that:

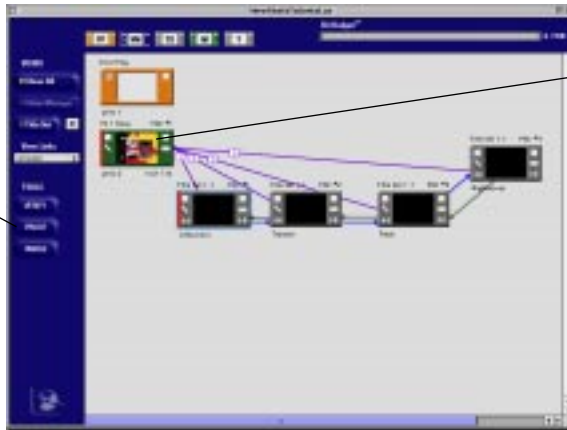
- The Tabasco Button jumps to 1:1 #2, "Tabasco":PG 1.
- The Pepsi Button jumps to 1:1 #3, "Pepsi":PG 1.
- The Bob Seger Button jumps to 1:1 #4, "Nightmoves":PG 1.

Now, each of the four buttons will play the appropriate PGC when activated.

Proofing the Menu

- 1 In the Layout window, click to highlight the video area of the Menu PGC and click **PROOF**.

2. Click
Proof .



1. Click to highlight
the menu PGC.

The proofing tool opens, and displays the menu.

- 2 Use the remote control's arrow keys to select different menu buttons and press **Enter** to activate buttons.