

# **DVD MENU MAKER HELPER**

## **OPERATING INSTRUCTIONS**

**(A COMPANION PROGRAM FOR THE PRV-LX1 DVD MENU MAKER APPLICATION)**

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## 1.0 INTRODUCTION

The **Menu Maker Helper** (MMH) application is a Microsoft® Windows®-based, companion-program to the original *PRV-LX1 DVD Menu Maker*. MMH acts as a wizard for managing repetitive actions within Photoshop such as duplicating buttons and creating mask layers. The program includes several background images and button templates; however, your custom backgrounds and button designs can also be pulled into MMH. Once a background graphic or a button template is added to MMH, the design is available for future projects.

After the Photoshop file (.psd) is built, use the original *Pioneer PRV-LX1 DVD Menu Maker* program (**LX1 Menu.exe**) to convert the file into a custom menu for the PRV-LX1. A menu layout usually consists of a background for the menu, a disc title, buttons and/or thumbnails to view video clips, and Previous/Next Menu buttons if there are multiple pages to a menu. DVD Menu Maker creates this series of files that become a custom layout menu when imported in to the Pioneer PRV-LX1 professional recorder.

This document describes how to create a Photoshop file using MMH (and the original DVD Menu Maker application) that can be converted into a custom menu layout for the PRV-LX1. You must be familiar with Photoshop layer creation and manipulation to build this file.

### 1.1 Operation Requirements

When using MMH to build custom DVD menus, both Pioneer applications as well as a version of Adobe® Photoshop® with the Scripting plug-in and Apple's Quick Time player must be installed on your computer. MMH needs Photoshop to build the PSD file and the DVD Menu Maker program requires Quick Time to preview your custom menu for the Pioneer PRV-LX1 professional recorder. The application versions are as follows:

- Adobe Photoshop version 7.0 or later
- Adobe Photoshop Scripting plug-in for version 7.0  
(*Photoshop version CS does not require this plug-in*)
- Apple Quick Time version 6.0 player or later
- Pioneer DVD Menu Maker version 1.0 or later
- Pioneer Menu Maker Helper version 1.0 or later

When creating PSD files with the MMH program, the application depends heavily on the History information maintained by Photoshop during the building process. Because History information is lost once a Photoshop file is saved or closed, the final PSD file must be built in a single menu-development session.

### 1.2 Additional Requirements

Before beginning to build your custom menu, consider the following features:

- How many buttons are needed
- If your layout will have buttons on a single screen or there will be multiple pages representing a single menu thus requiring Previous/Next buttons

- If your disc includes Title menus with Chapter menus under each which would require a Top Menu button as well as Previous and Next buttons
- If the Disc Title and button labels will be part of the background or pulled from the PRV-LX1's Function menu

Although the PRV-LX1 supports both Title-only and Title-Chapter menu structures, MMH currently supports a single menu layout (background and button layout) per project/disc. Because of this limitation, your design must work within the following parameters:

- A Disc Title label placed on the background must anticipate all button locations including a Previous menu page, Next menu page buttons, and a Top Menu button for multi-page and/or multi-layer menus. Multi-page menus would require Previous menu page and Next menu page buttons. However, not all projects will have multiple menu pages. To build a layout usable for multiple projects, create a Disc Title layer in a separate file then 'duplicate' the layer over the Background layer before the layout is flattened.
- Although a Top Button may appear only on a single menu page, the menu layout must anticipate and avoid overlapping that button location.

Other file guidelines are as follows:

- ✓ **DO NOT SAVE** any Photoshop files during the build process (*MMH depends heavily on Photoshop's History and Layer Memory features. Saving any files between steps causes the MMH program to lose track of layers that must be discarded in the final step. The end result is a PSD file that fails to properly convert to a menu for the PRV-LX1.*)
- ✓ File dimension must be 720 pixels (W) x 540 pixels (H). The DVD Menu Maker application reduces the file to the DVD standard of 720 pixels (W) x 480 pixels (H) before importing in to the PRV-LX1 (*adjusting the file dimensions allows round objects to retain their shape after the conversion*).
- ✓ Two borders appear on the background file. The area inside the smaller (red) border is the Title-Save area. Within the larger border (yellow) is the object-safe area. Keep buttons within the yellow border and all text within the red border.
- ✓ Black (RGB: 0,0,0) is equivalent to hiding material on a particular layer.
- ✓ White (RGB: 255,255,255) indicates a transparent area that allows another layer's data to show through.
- ✓ Layers not used for a particular menu must still be present for the conversion (*i.e. Thumbnail Area/Mask layers, Text layers, etc.*).
- ✓ Per DVD specifications, button and thumbnail areas must be squares or rectangles (*however, button/thumbnail shapes may be any polygon, see sample layout for example*)

- ✓ Button and Thumbnail Areas must be a particular color as this delineates the button order (*more information on these colors is available in the operating instructions for the original program, DVD Menu Maker*).
- ✓ Custom menu name (folder name) may include dashes or underscores between characters but spaces in the name cause the PRV-LX1 import function to fail.
- ✓ PRV-LX1 DVD Menu Maker is compatible with operating systems Microsoft® Windows® 2000 and XP® and with Photoshop 7.0 or later.

## **2.0 INSTALLATION OF THE PIONEER APPLICATIONS**

Refer to the following sections for information about installing the Pioneer applications.

### **2.1 Menu Maker Helper Installation**

Before installing MMH, verify that Photoshop is installed and functioning properly. If the Photoshop program is missing or corrupted, stop now and remove then re-install the program before continuing with the MMH installation process.

#### ***Install the MMH application:***

1. Copy the MMH program installer to your computer desktop.
2. Double-click on the installer to begin the installation process.
3. Follow the on-screen prompts to complete the installation.  
*The installer creates a folder called Pioneer Electronics under Programs. The DVD Menu Maker Helper program is installed under this folder.*

### **2.2 DVD Menu Maker Installation**

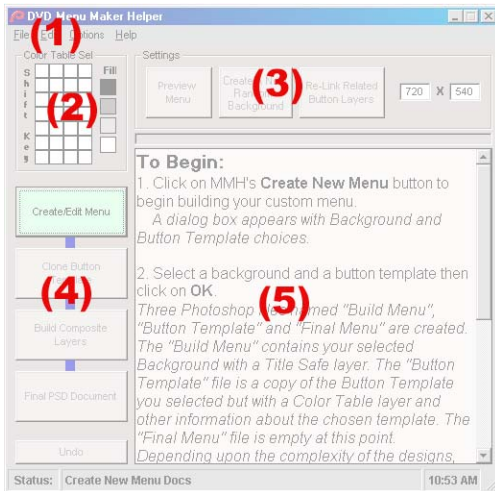
Simply copy the **LX1-Menu.exe** file on to your desktop. The application is self-contained and operates by clicking on the program icon. The application is added to the Pioneer Electronics folder created in the previous step.

*Note: Although the application requires that the Quick Time 6 player be installed on the PC, the player does not have to be running to use DVD Menu Maker.*

## **3.0 MENU MAKER HELPER (MMH) OPERATION BASICS**

When the MMH program is launched, it also opens Photoshop. If Photoshop is already running, the MMH program window opens on top of the Photoshop window. Any image files already open in Photoshop can trigger the MMH program to try to use the files as Menu Backgrounds or a Button template. To avoid accidentally selecting files not built by MMH, close all images unless a file is your background or button template before launching the MMH application.

The MMH application window is comprised of five sections; (1) menu bar, (2) color table, (3) Settings, (4) primary command buttons, and (5) information dialog box.



Each section becomes available only when an action or modification is possible. For example, although the Color Table appears active when MMH is opened, the color has nothing to work with until the Create New Menu button is selected.

When the MMH application is initially opened, the options available are the *menu bar*, the *menu size* from Settings, and the *Create New Menu* button under the Commands area. The menu bar options and the menu size setting are discussed in the following sections of this manual.

### 3.1 Menu Bar

Of the four Menu Bar items, File and Edit offer Windows-standard commands (Exit, Cut, Copy, and Paste) and Help provides application data but the Options sub-menu offers application-specific controls. The default settings on the Options menu include common DVD menu items such as Previous/Next buttons, a Title for the Menu, and more. Review the options and activate commands that apply to your custom layout. Click on an item from the sub-menu to turn ON/OFF the option.

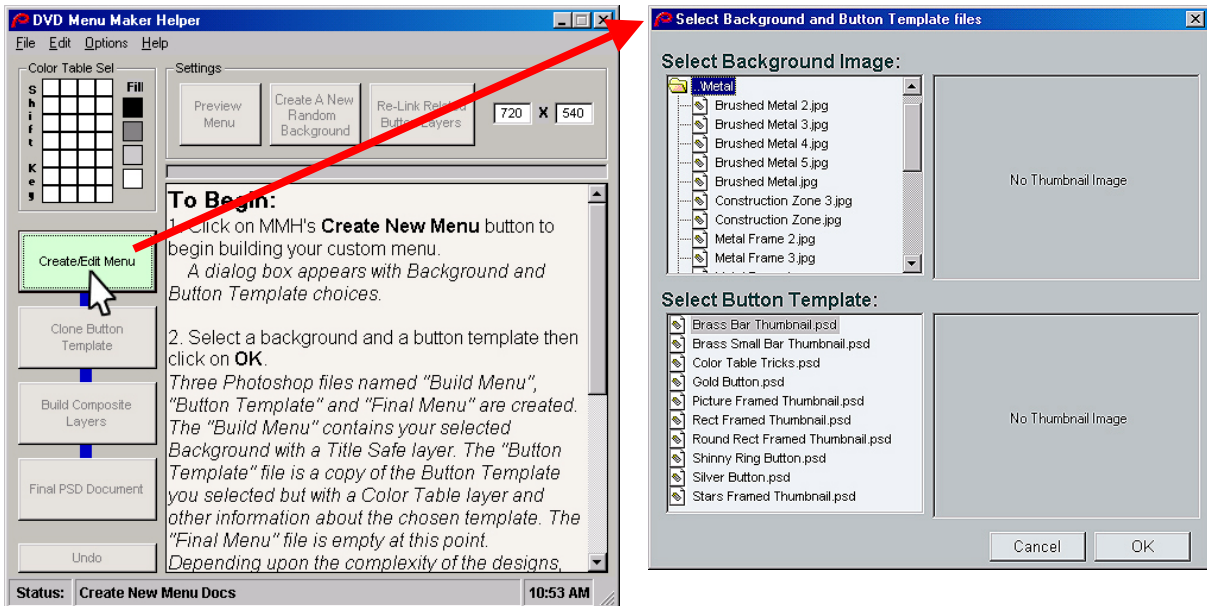
*Note: Some button templates provided with the MMH program require certain options to be activated. Please check the button template layer for notes regarding option selections. More information about Options appears later in this document.*

### 3.2 Menu Size Setting

MMH's default menu size is 720 pixels x 540 pixels although DVD menus are 720 x 480. A 720 x 480 image generated on a computer appears "squished" when displayed on a TV. The appearance difference is because TV video uses rectangular pixels to display an image while a computer monitor uses square pixels. DVD authors build menus at 720 x 540 then reduce the file to 720 x 480 to maintain image quality on the final menu. To keep all buttons and shapes true, MMH automatically scales your 720 x 540 image to 720 x 480 during the final step.

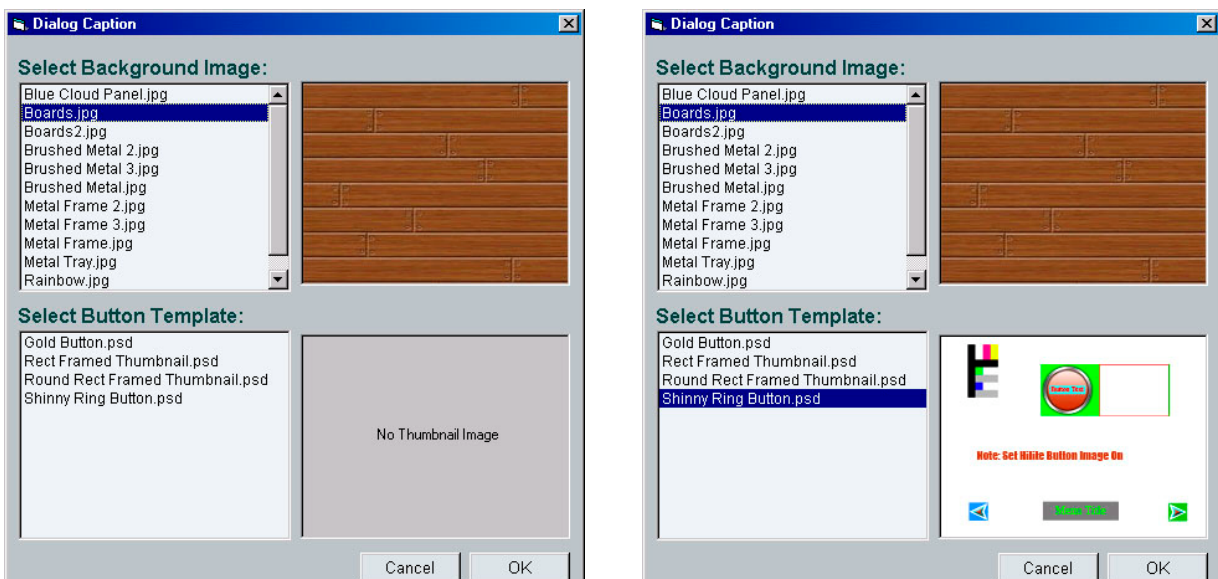
## 4.0 CREATE NEW MENU

Click on the **Create New Menu** button to begin building your custom menu.



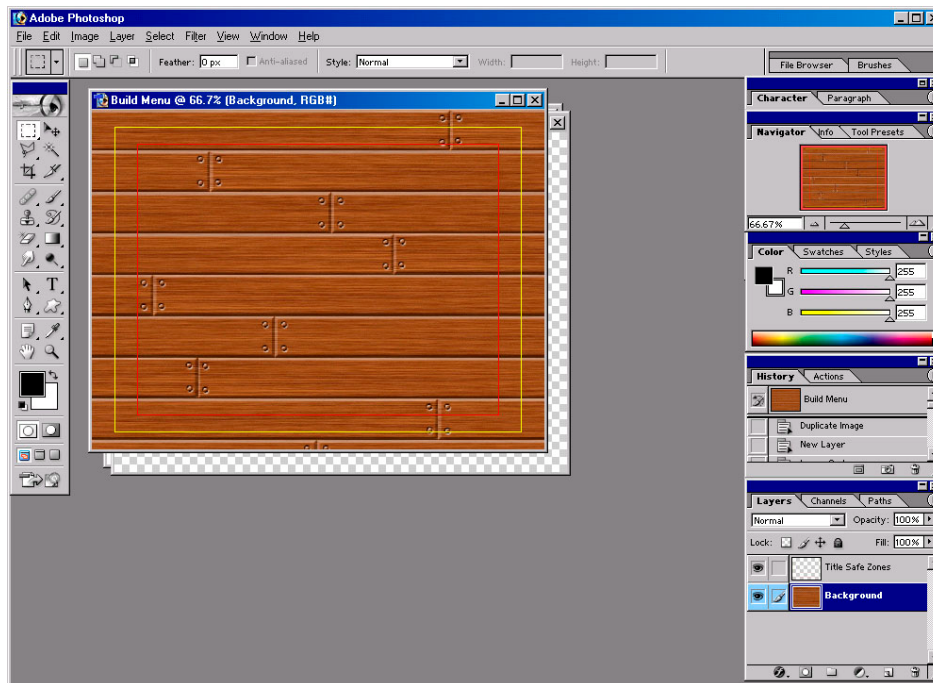
For learning purposes, we'll use a background and button template provided with MMH.

1. Select a background from the list.  
*The example below uses Boards.jpg from the Wood folder for the background.*
2. Choose a button template.  
*For demonstration purposes, please use the Shiny Ring Button.psd template.*
3. Click **OK** to begin building the menu.  
*This process takes a short period to complete. A progress bar is located above the MMH text box. When the progress bar is filled with blue, continue to the next step.*



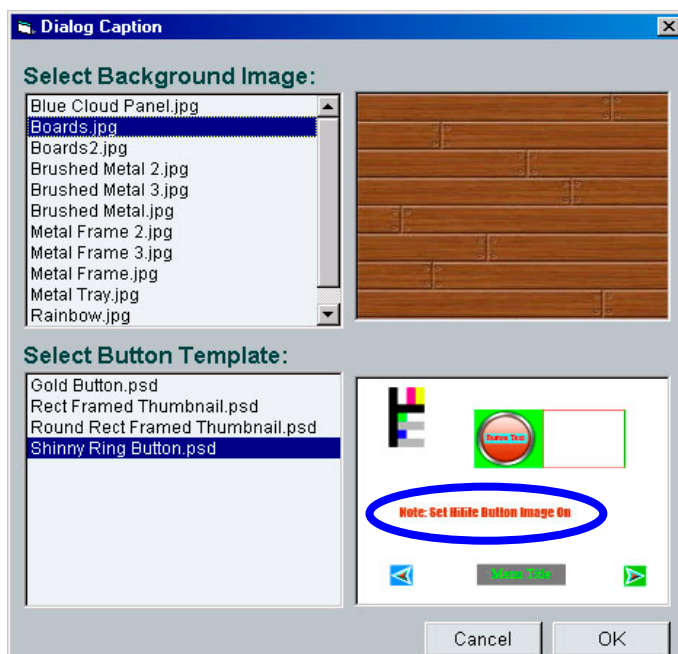
*Note: Refer to the final section in this document for information about creating your own button templates to add to the Menu Maker Helper application.*

A series of multi-layer files are created in Photoshop. These individual files eventually merge in to a single PSD that will be converted using the DVD Menu Maker program. Do not delete or merge any layers or files during the menu building process. MMH handles all merges for you.



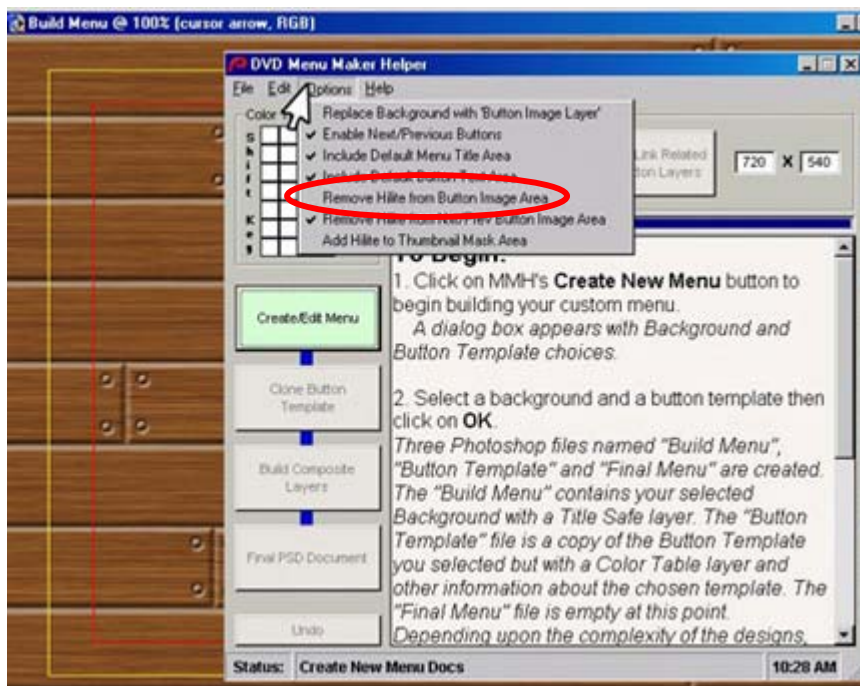
*Note: The red border on the Build Menu file indicates the Title-Safe area. Text should be kept within this border. However, button and thumbnail images can be placed closer to the edge, within the yellow border.*

Some of the button templates have notes about options or layer details. To set the options, use the drop-down Options list from the menu bar. Notes about the design, shown in the middle of the button template, are in red text (see below).



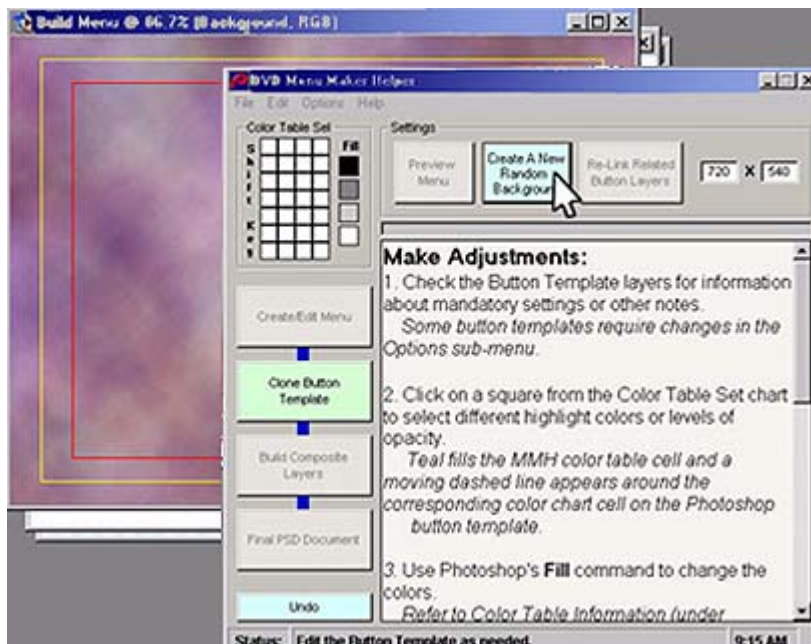


Our selected button template includes a note about deactivating an Option from the Menu Bar. Un-checking the *Remove Hilite from Button Image Area* option for this template causes select/activate button highlights to appear on the shiny ring rather than filling the button image.



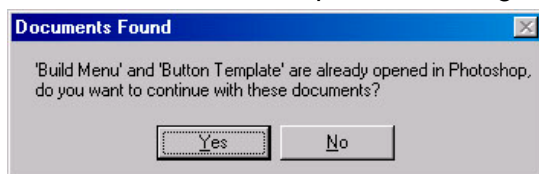
*Note: When making your own button templates, copy an existing template file with a new name then experiment with the layers.*

Once the Photoshop files are built, MMH provides a way to try different backgrounds. With the background layer brought to the front of the file, click on the middle button under Settings, Create A New Random Background. Each click of this button changes the colors and general pattern, replacing the selected background.



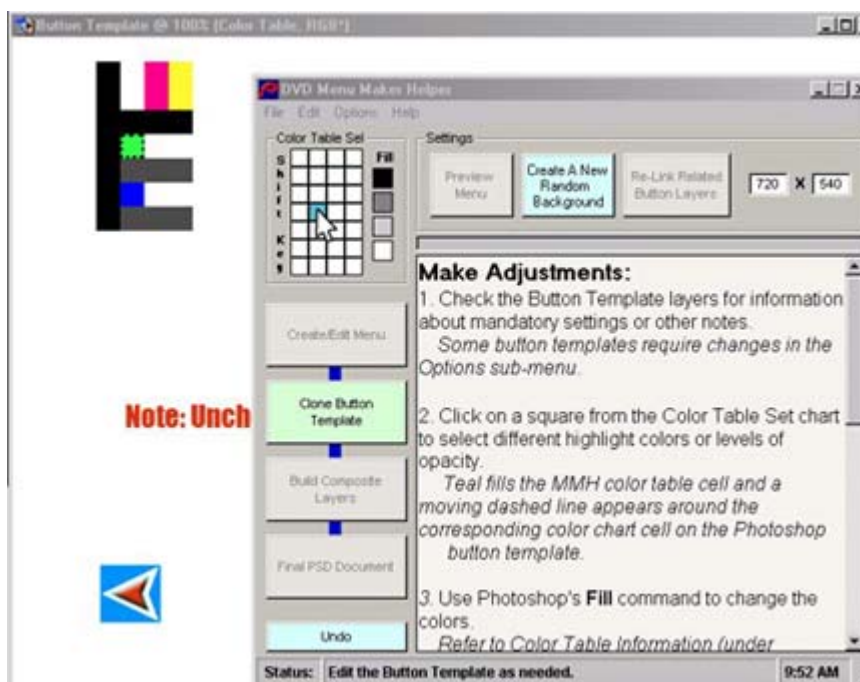
To revert to the original background, follow the directions below.

4. Click on the **Undo** button at the lower left section of the MMH window.  
*The MMH application returns you to the original view with the **Create New Menu** button available.*
5. Click on the **Create New Menu** button again.
6. Choose **No** to select the previous background image and button template.



#### 4.1 Changing Highlight Colors

There are several changes available at this stage of menu development. One change is to choose new Select and Activate highlight colors. Each 20-pixel block on the Color table denotes a cell of color or of an opacity level for button highlights.



Although some cells seem to be larger than a normal cell (40 pixels x 20 pixels, 20 pixels x 80 pixels, etc.), this appearance is deceiving. Because the color table does not have borders around each cell, similar-colored cells visually merge. However, a PRV-LX1 DVD Menu references a specific mapped location for each cell/color and each opacity/contrast level.

*Note: The Shiny Ring Button template uses white within the button template layer set to indicate highlight areas. For this exercise, do not change the Photoshop and Normal color values from white.*

The chart below provides a guideline for identifying which cell reflects which value.

Photoshop Color 1 (BLACK)	Photoshop Color 2	Photoshop Color 3	Photoshop Color 4
Normal Color 1 (BLACK)	Normal Color 2	Normal Color 3	Normal Color 4
Normal Contrast 1 (BLACK)	Normal Contrast 2 (Gray tone is opacity Menu Maker 00 to 15)	Normal Contrast 3 (Gray tone is opacity Menu Maker 00 to 15)	Normal Contrast 4 (Gray tone is opacity Menu Maker 00 to 15)
Select Color 1 (BLACK)	Select Color 2	Select Color 3	Select Color 4
Select Contrast 1 (BLACK)	Select Contrast 2 (Gray tone is opacity Menu Maker 00 to 15)	Select Contrast 3 (Gray tone is opacity Menu Maker 00 to 15)	Select Contrast 4 (Gray tone is opacity Menu Maker 00 to 15)
Action Color 1 (BLACK)	Action Color 2	Action Color 3	Action Color 4
Action Contrast 1 (BLACK)	Action Contrast 2 (Gray tone is opacity Menu Maker 00 to 15)	Action Contrast 3 (Gray tone is opacity Menu Maker 00 to 15)	Action Contrast 4 (Gray tone is opacity Menu Maker 00 to 15)

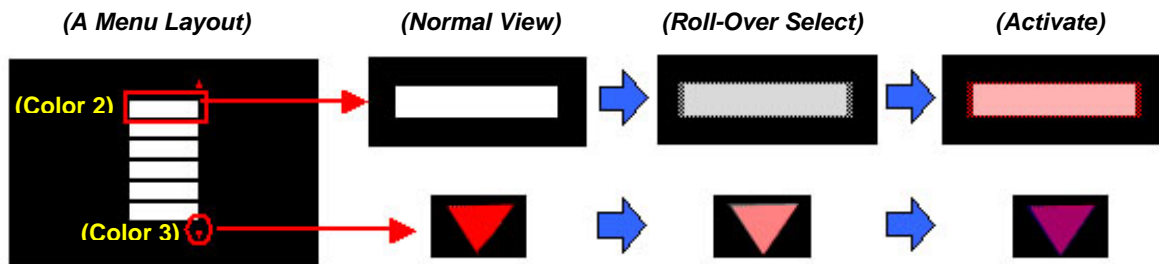
The first vertical bar must remain black but all other 'color' cells may be any RGB setting. The 'contrast' cells must be a shade of gray ranging from black [00] for least opaque (hides the highlight color from showing through on the menu) to >1% gray [15] for the highest degree of opacity (reveals the highlight color overlaying the button activation color) in DVD Menu Maker.

Example with colors with borders and descriptions for the 4-color limit set by the DVD Forum:

	Color 1	Color 2	Color 3	Color 4	
Photoshop					<b>Photoshop:</b> Color as shown in Photoshop file
Normal					<b>Normal:</b> Color that specifically matches shapes on the Highlight Area (Subpicture) layer within DVD Menu Maker and within the MMH button template layer set
Opacity					
Select					<b>Select:</b> When a button is selected (roll-over highlight), a partially transparent (opaque) color appears <i>Ex: Colors 2, 3 &amp; 4 become 50% transparent</i>
Opacity					
Active					<b>Active:</b> When button is activated, partial transparent highlight color appears <i>Ex: Buttons(s) using Color 1 make Orange (RGB: 255,102,0) change to Brown (RGB: 191,128,64)</i>
Opacity					

*Note: Avoid using too many highlight colors on a single menu as this can cause confusion for the viewer.*

Examples of buttons with Color 2 and Color 3 applied according to the previous chart:

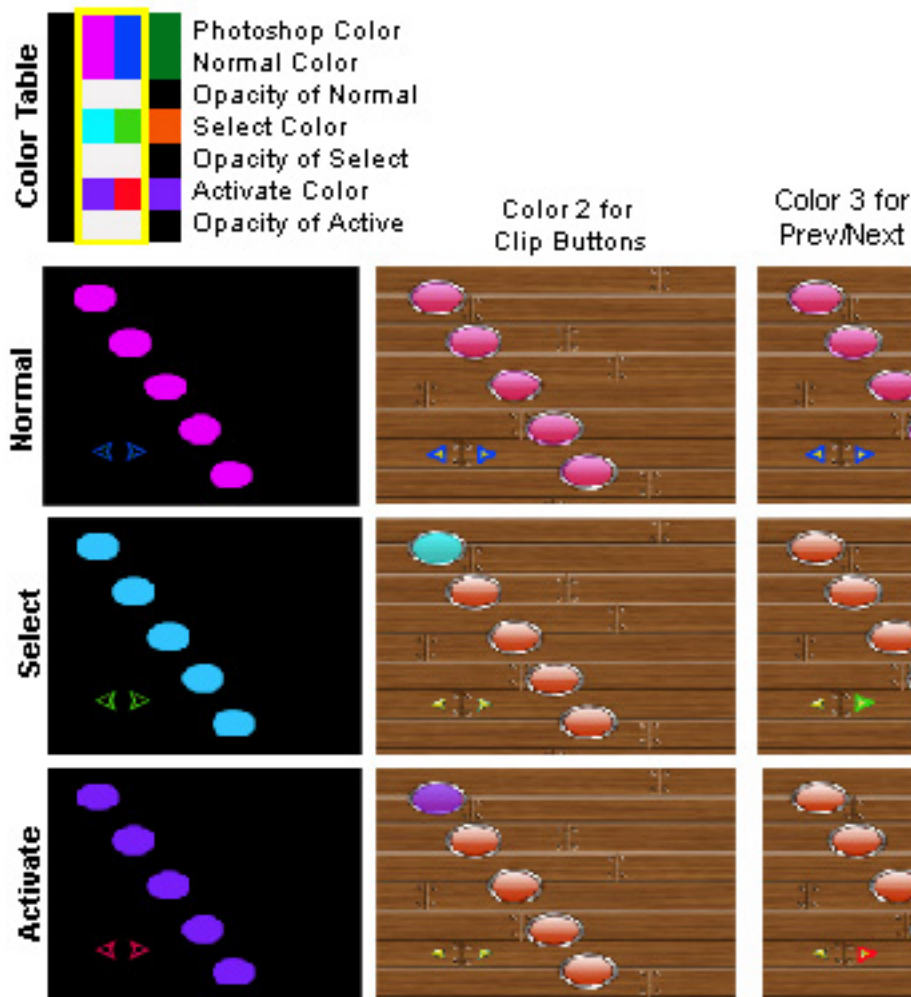


Highlight colors are affected by opacity levels; shown as gray cells on the Color Table. The darker the shade of gray, the less of the color shows through as a highlight. For example, the *Normal* color is blue (RGB: 75, 50, 250) and the *Select* color is gold (RGB: 240, 200, 5). When the *Select* color's opacity level is set to black (15) the button highlight area remains blue (RGB: 75, 50, 250). However, if the *Select* color's opacity level is changed to 35% gray (approximate opacity level 10) then the *Normal* color (blue RGB: 75, 50, 250) becomes washed with gold over the blue when selected. The button highlight changes from a *Normal* state of blue (RGB: 75, 50, 250) to a *Select* state of purple (RGB: 133, 102, 164), a blending of blue with gold.

The following example menu shows how highlights change with different Opacity levels.

<b>Color Table</b>	<ul style="list-style-type: none"> <li>Photoshop Color</li> <li>Normal Color</li> <li>Opacity of Normal</li> <li>Select Color</li> <li>Opacity of Select</li> <li>Activate Color</li> <li>Opacity of Active</li> </ul>
<b>Normal</b>	<div style="border: 1px solid black; padding: 5px; margin-top: 5px;">                 Using Color 2 (outlined in red), the Opacity value for Normal is black so that none of the color shows through.             </div>
<b>Select</b>	<div style="border: 1px solid black; padding: 5px; margin-top: 5px;">                 Opacity value for Select is 40% gray. Light blue tints the button when it is selected (rolled over).             </div>
<b>Activate</b>	<div style="border: 1px solid black; padding: 5px; margin-top: 5px;">                 Opacity value for Active is 5% gray so that the purple highlight actually fills the button when it is activated.             </div>

Note: The higher the contrast number, the stronger the highlight color on the menu.

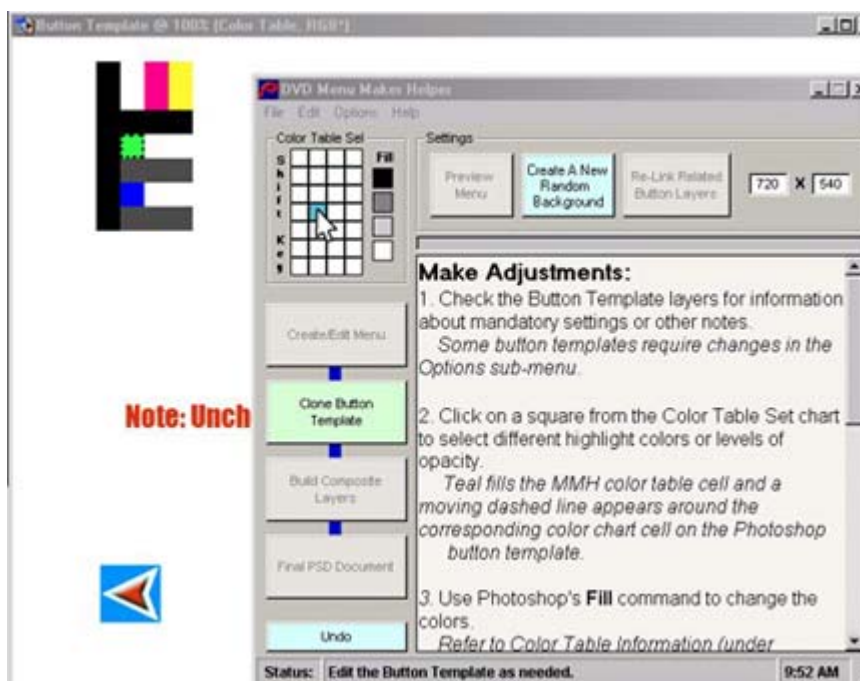


*The shade of gray defines the opacity level within Menu Maker Helper. MMH matches the selected gray to the closest value in DVD Menu Maker. DVD Menu Maker's sixteen opacity levels / values range from 00 (black) to 15 (equal to >3% gray).*

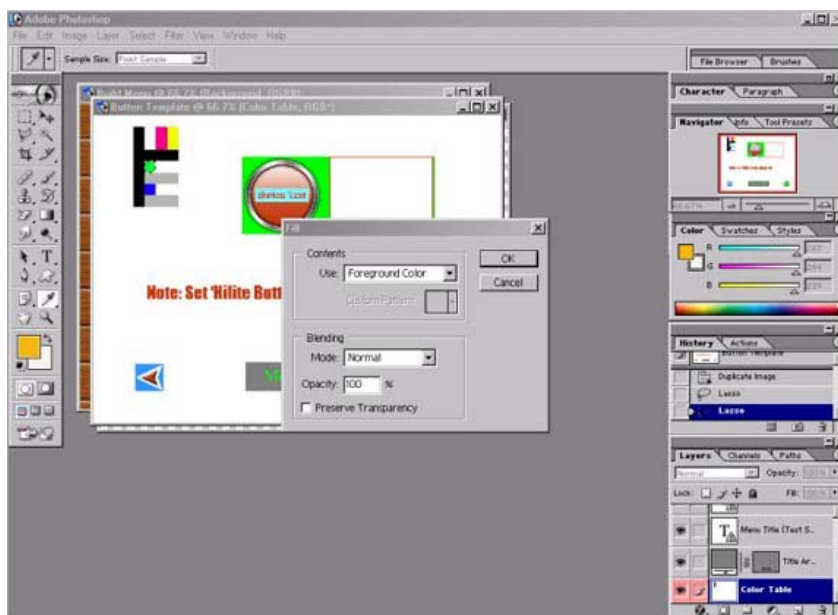
The Shiny Ring Button template uses black and white to indicate highlight areas. For this exercise, do not change Color 1 from all black or Color 2's Photoshop and Normal color from white. Follow the directions below to change others colors and opacity levels.

1. Bring the **Button Template** file forward to the top of the Photoshop window.
2. Lay the MMH application window on top of the Photoshop window.
3. Position the MMH window so that you are able to see the Color Table on both the application and in Photoshop.

- Click on a Select or Active color cell from the MMH Color Table Set area.  
*The selected cell changes to teal on the MMH color table and a dashed line appears around the corresponding cell on the button template.*



- Change colors using the **Fill** command from within Photoshop.  
*Color Table assignments must be 100% opacity and Normal blending mode.*



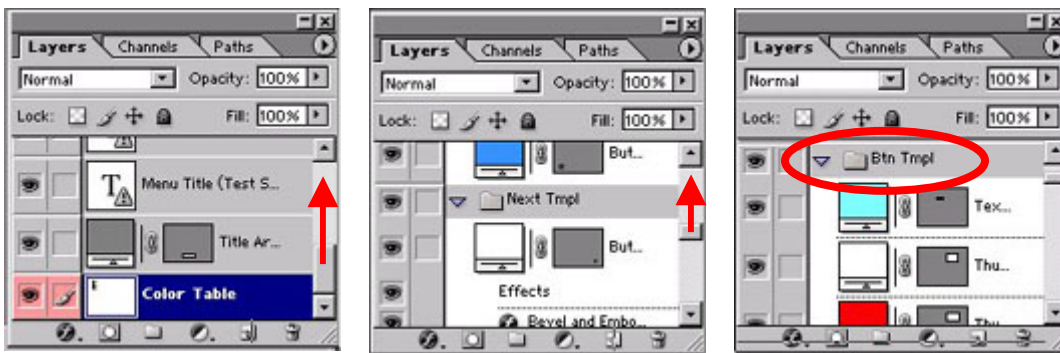
- Return to the MMH application window to select another cell to change avoiding the Photoshop and Normal color cells for this exercise.  
*The Shiny Ring button template uses the first (black) vertical bar, Color 1, and the second vertical bar, Color 2. Changes to Color 3 and Color 4 when using this template have no effect on the final menu.*

7. Practice selecting one or more color and/or contrast cells still avoiding the Photoshop and Normal color cells for this exercise.
  - *Single Cell* – click on a cell from the MMH window
  - *Multiple Cells With Common Borders* – hold down the Shift key then click and drag over the appropriate cells
  - *Multiple Cells Without Common Borders* – hold down Shift and click on the cells
8. Continue toggling between MMH and Photoshop to make your changes.

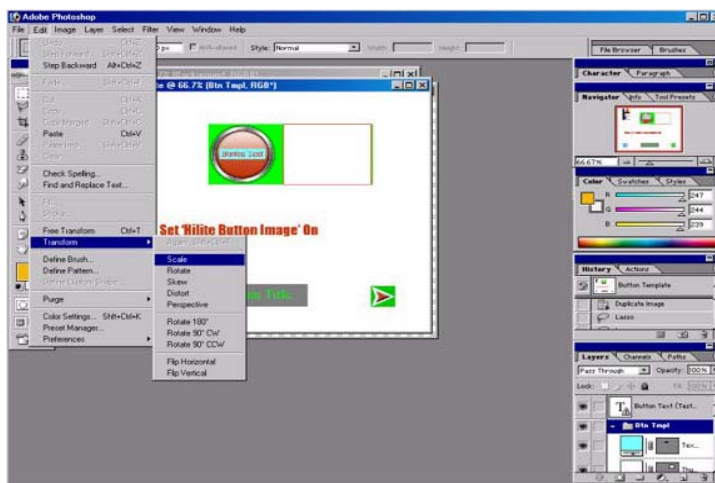
## 4.2 Resizing Menu Buttons

Another common change is to resize the button. Resizing the button at this point keeps all buttons uniform. MMH does not provide an automated method for changing button size or shape. Follow the directions below to change a button template within Photoshop but without adversely affecting MMH processes.

1. Bring the Button Template layer to the forefront of Photoshop.
2. Scroll through the Layers to locate the button (Btn Tmpl).

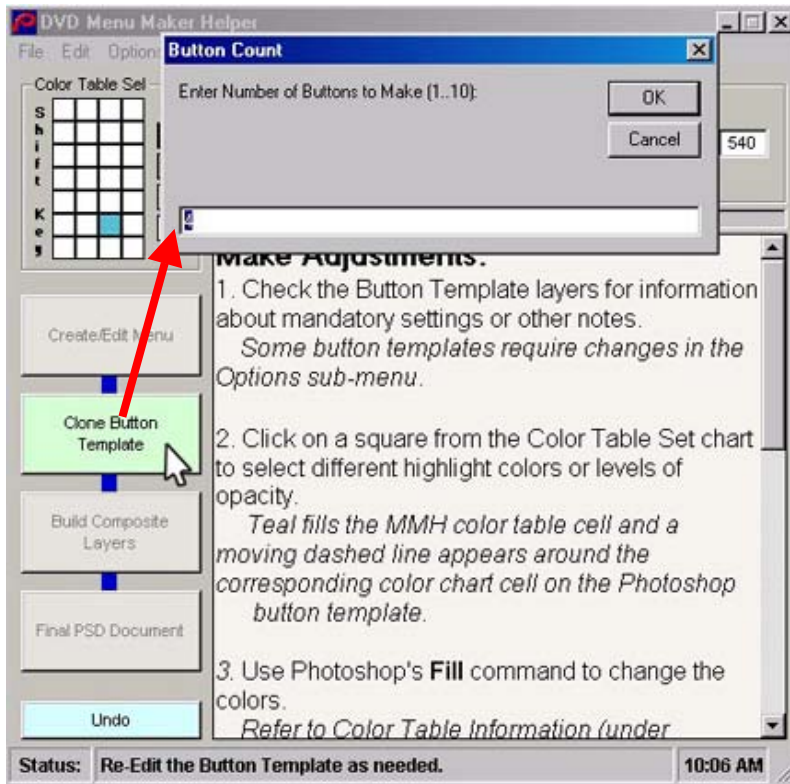


3. Click on the Btn Tmpl layer to select all layers in the set.
4. Resize the Btn Tmpl layer using the Transform / Scale command.



### 5.0 CLONE BUTTON TEMPLATE

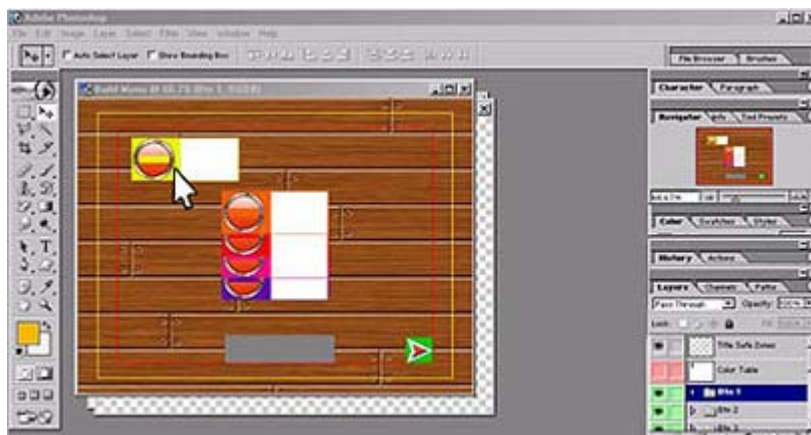
The second menu development stage is to duplicate the appropriate number of buttons for your custom menu. Click on the Clone Button Template button to enter the number of buttons. This generation of the MMH program supports up to ten buttons.



### 5.1 Arrange Button Layout

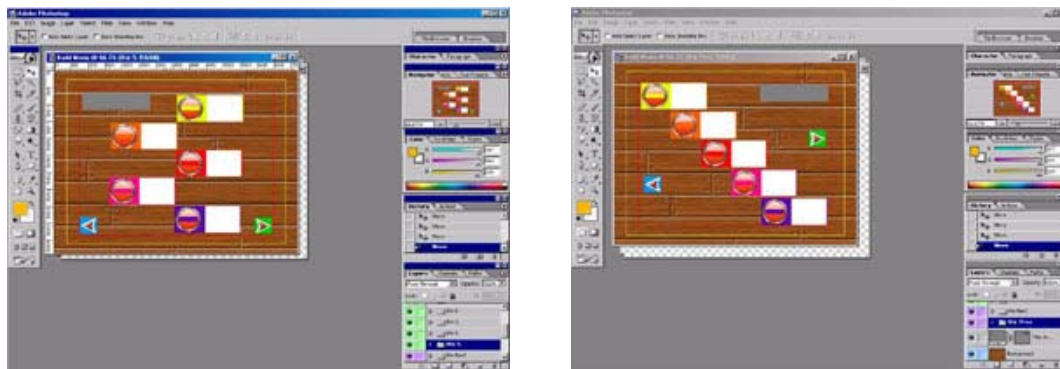
The MMH program creates the buttons and places them on the background in numeric order. This process may take several seconds depending upon the quantity and complexity of the button template.

For ease of use, collapse each button layer (Btn #) so that only the top line appears in the Layers window. Move the buttons until they fit your vision of the DVD menu.





Some possible button layouts:



If the buttons do not fit the menu, take the following steps to resize the buttons again.

1. Bring the MMH program window to the forefront.
2. Click on the **Undo** button located in the lower left section.
3. Return to the Photoshop window.
4. Bring the button template file to the forefront.
5. Select the **Btn Tmpl** layer from the Layers list.
6. Resize the button template.
7. Recall the MMH program window.
8. Click on **Clone Button Template** again.

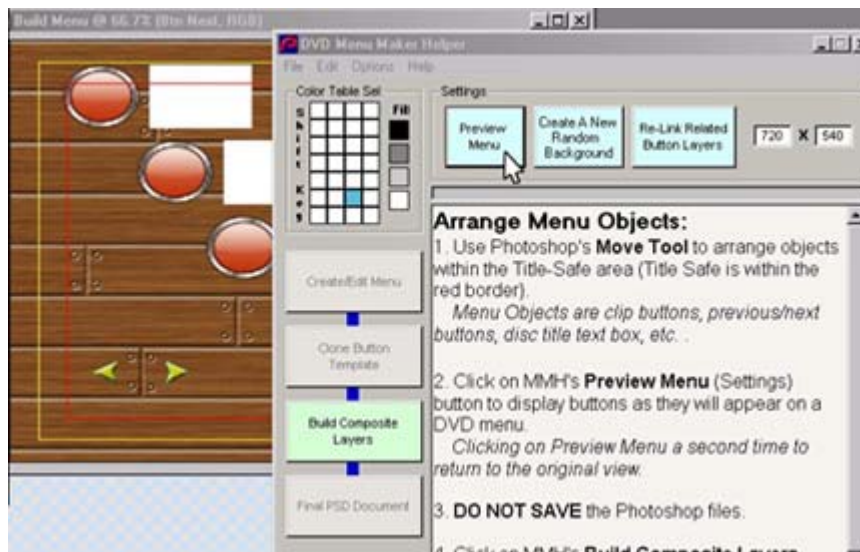
Do not change button area colors (those shown as the base of the button image and on the button text area) as the exact RGB assignments dictate button order. Although MMH handles all these color order assignments for you, to design your own button templates refer to the following chart.

Access Order	Color	Red (R)	Green (G)	Blue (B)
Button 1	Yellow	239	253	0
Button 2	Orange	249	100	4
Button 3	Red	218	0	18
Button 4	Pink	243	0	137
Button 5	Purple	85	0	169
Button 6	Dark Green	0	105	0
Button 7	Brown	84	45	2
Button 8	Cream	250	206	151
Button 9	Tan	200	155	100
Button 10	Bright Green	33	255	146
Next Button	Green	0	196	0
Previous Button	Blue	56	145	255
Disc Title	Gray	127	127	127

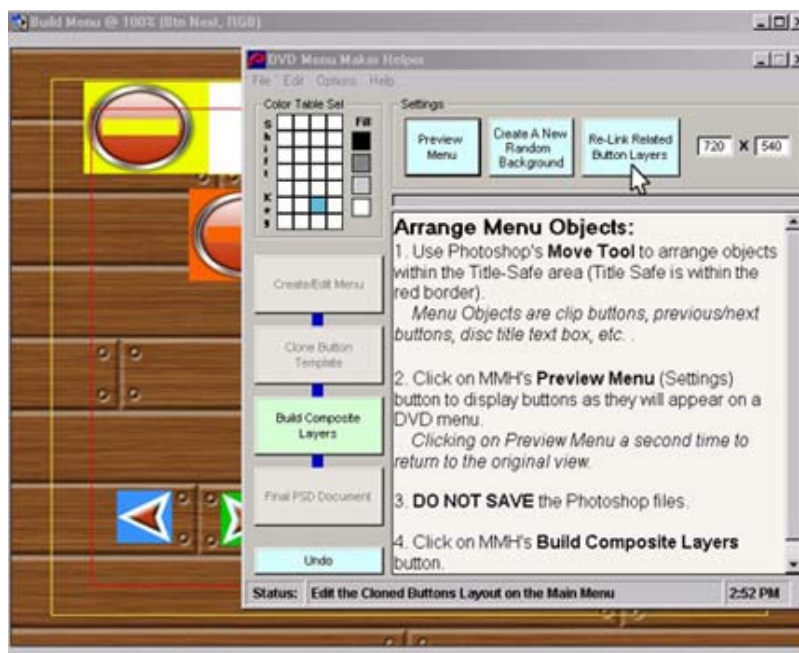
## 5.2 Additional Settings Available After Button Creation

There are two additional settings that become available only after the buttons are created. These settings are **Preview Menu** and **Re-link Related Button Layers**.

Clicking on *Preview Menu* causes the buttons to appear on the Photoshop background image as they will appear on the final DVD menu. Clicking again removes the preview.



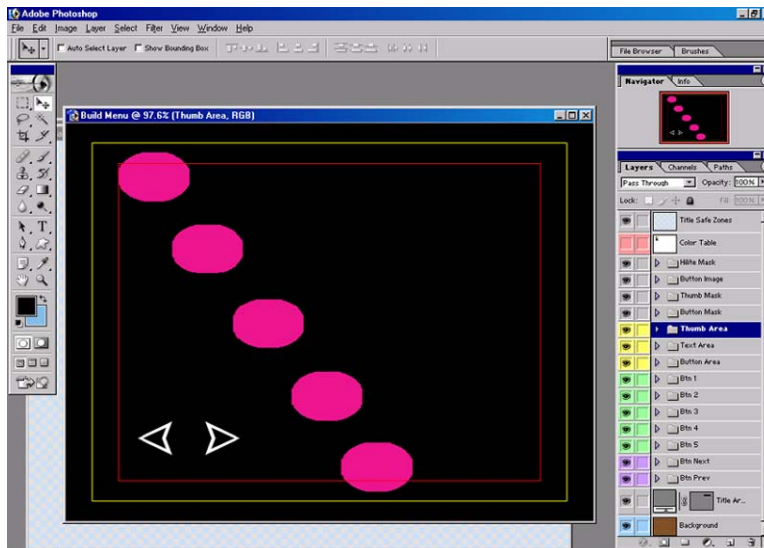
The final Setting button, Re-link Related Button Layers, re-joins the layers on an individual button. To apply changes to a layer, remove the link to the other layers in that linked layer. After making all changes to the Photoshop layers, simply bring the MMH window to the forefront and click on the Re-Link button. The template's layer links are re-established; however, the command does not re-align the layers. If the button mask layer is accidentally misaligned, this command does not repair the error.



*Note: For Button Template layer information refer to Appendix B later in this document.*

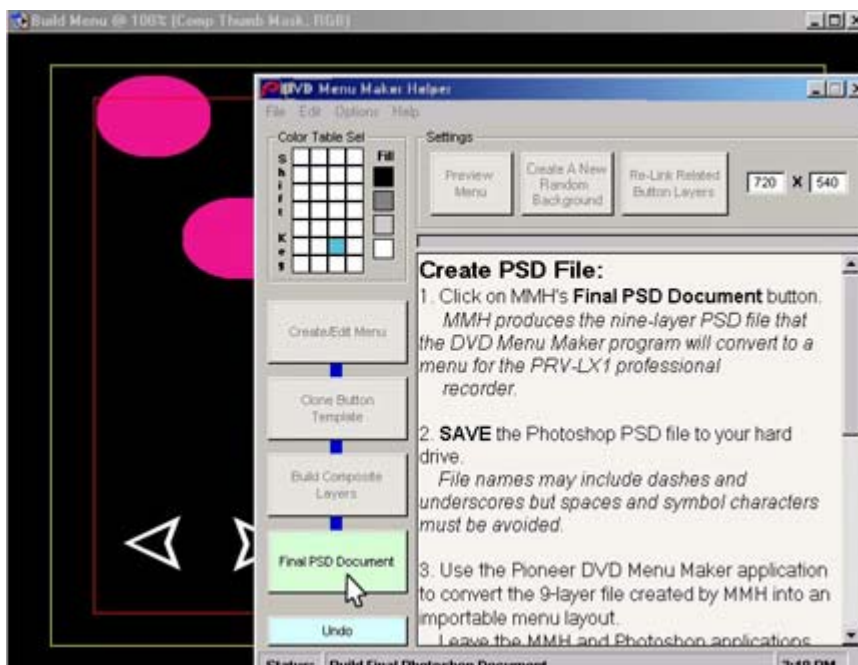
## 6.0 BUILD COMPOSITE LAYERS

The **Build Composite Layers** command creates a significant number of layers on top of the background image file. These new layers provide the button, thumbnail, mask, and highlight information for a menu that complies with the DVD Forum specifications. To see all layers before creating the final PSD file, collapse each layer to a single line item.



## 7.0 FINAL PSD DOCUMENT

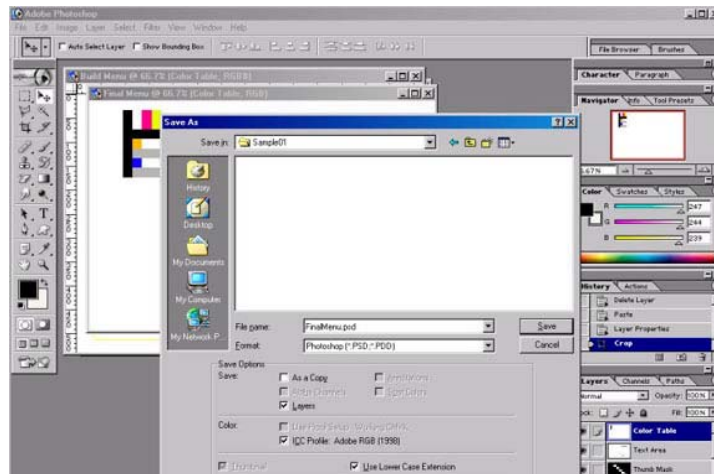
To create the final PSD file, Click on the fourth button, **Final PSD Document**. Clicking on this button causes the MMH program to discard extraneous layers, manipulate layer sets, and merge supporting files in to a single 9-layer Photoshop file.



*Note: The MMH program automatically scales the file dimensions to 720dpi x 480 dpi.*

The next step is to convert this PSD file into a form recognizable by the PRV-LX1. Follow the directions below to prepare the file for conversion.


1. Minimize the MMH application window.
2. Enter a name for the custom 9-layer menu file.  
*The file must end with the Photoshop file extension (PSD).*



3. Bring the MMH program window to the forefront.
4. Click on **File** from the menu bar.
5. Select **Exit** to close the MMH application.
6. Close all remaining files within Photoshop but leave the application open.

## 8.0 CONVERT PSD TO A CUSTOM MENU (FOLDER)

Once the Photoshop (psd) layers are complete, the file needs to be processed by the PRV-LX1 DVD Menu Maker application. The application splits the layers in to files that can be imported in to the PRV-LX1, creating a single DVD Menu layout. Before processing the Photoshop file, read the following guidelines:

- Place PRV-LX1 DVD Menu Maker (  ) on your PC desktop for easy launching
- Create a folder on your computer hard drive that will hold the files generated from the application. The folder can be any name but must be empty before you begin.
- Folders names should be short in length and may not include any spaces.

## 8.1 Create The Import Folder/Files

Follow the steps below to create your import folder/file.

1. Create a new folder to receive the custom menu files.  
*The folder name becomes the menu name when imported in to the PRV-LX1. This name cannot have spaces and should have fewer than 12 characters.*
2. Launch the Pioneer PRV-LX1 DVD Menu Maker program.
3. Locate your custom Photoshop file on the hard drive.
4. Click on the **Open** button to select your .psd file.  
*A new window entitled Browse for Folder replaces the existing folder/file window.*
5. Locate and select the new folder you created to hold the import files.  
*PRV-LX1 DVD Menu Maker window replaces the Browse for Folder window.*
6. Click on the drop-down menu to check each layer of your menu layout.  
*Clicking on the **OK** button saves the file but also closes the application. Once the application is closed, no further modifications are allowed. Return to your Photoshop file to make corrections on any views listed as Preview-Only layers.*

## 8.2 Inspect the Custom Menu Layout

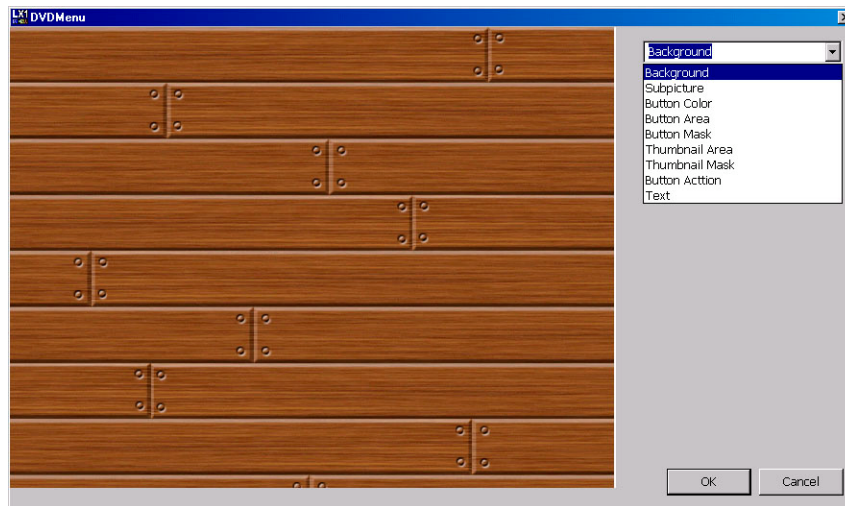
PRV-LX1 DVD Menu Maker provides seven preview screens. If any of the seven previews are missing or fail to display properly, there are probably layer or placement errors in your Photoshop file.

The screens and what they represent are listed below.

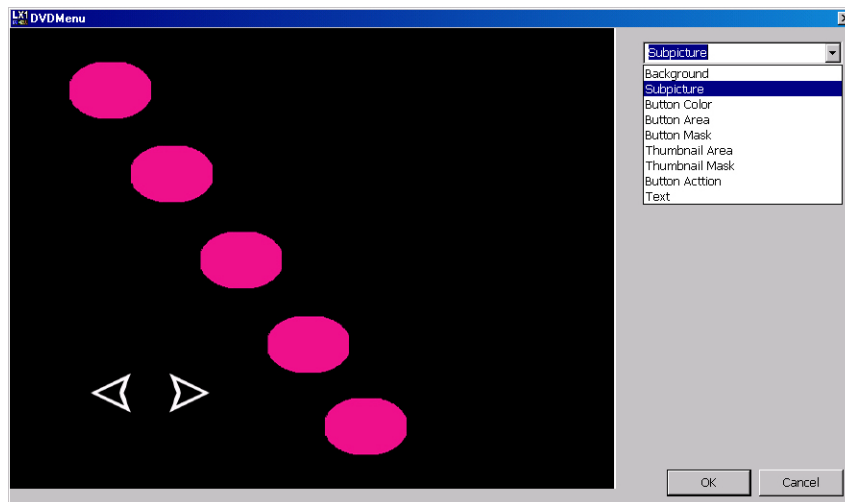
- **Background** – graphic that appears behind your custom menu  
*(preview only, no changes are available)*
- **Subpicture** –locations of all button highlighting  
*(preview only, no changes are available)*
- **Color Table** – allows the menu highlight (roll-over Select and Active) colors to be changed or the transparency levels to be modified
- **Button Area** – physical location and order of each button  
*(preview only, no changes are available)*
- **Button Mask** –active dimensions and order of each button  
*(preview only, no changes are available)*
- **Thumbnail Area** – physical location and order of each thumbnail  
*(preview only, no changes are available)*
- **Thumbnail Mask** –active dimensions and order of each thumbnail  
*(preview only, no changes are available)*
- **Button Action** – provides ability to reassign menu advancement and flow
- **Text** – allows the menu text color and font size to be changed. Button and disc title text is NOT entered though this window (refer to the operating instructions, DVD Menu section, for instructions on how to add a disc title or button labels/text)

*Note: Clicking on the **OK** button saves the file but also closes the application. Once the application is closed, no further modifications are allowed.*

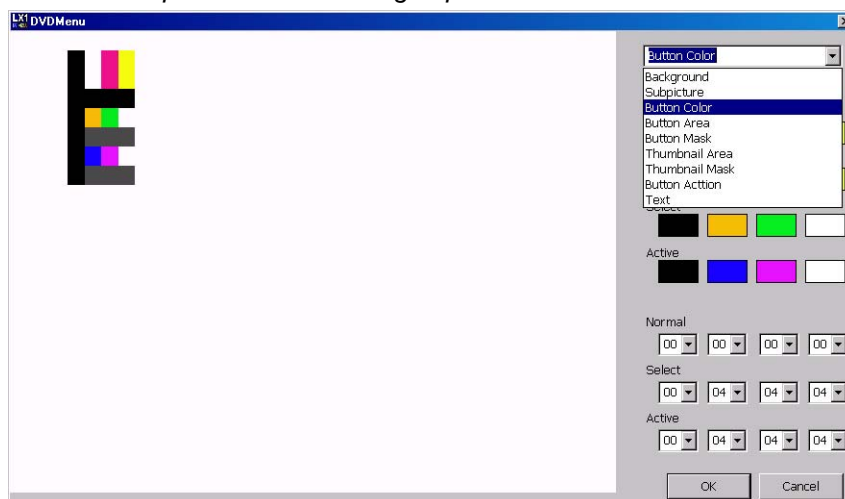
**Background** is for preview only, no changes are available



**Subpicture (Highlight Area)** is for preview only, no changes are available

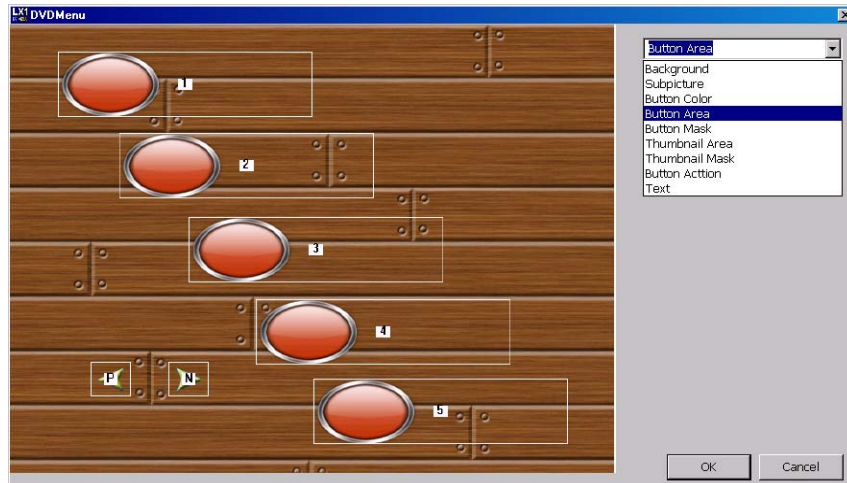


**Color Table** provides color change options

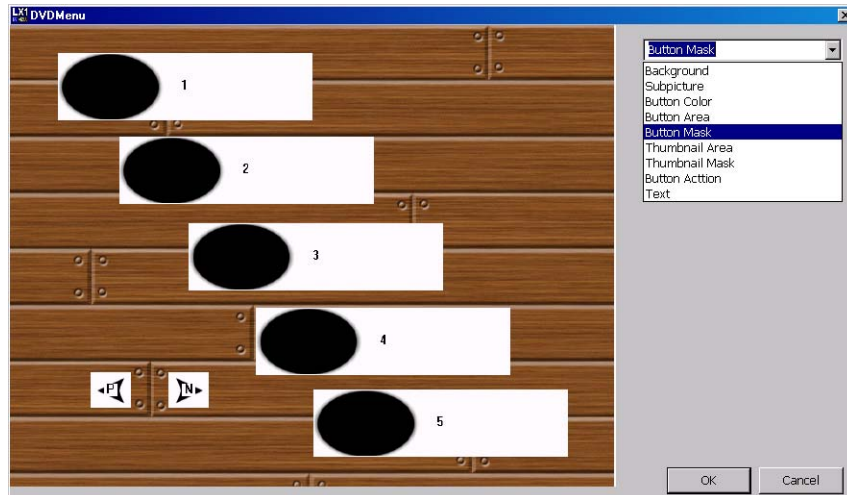


Note: Choose a color block from the right side of the window to change a highlight (select or active) color. The numbers (lower right) represent degrees of opacity (range 00 to 15).

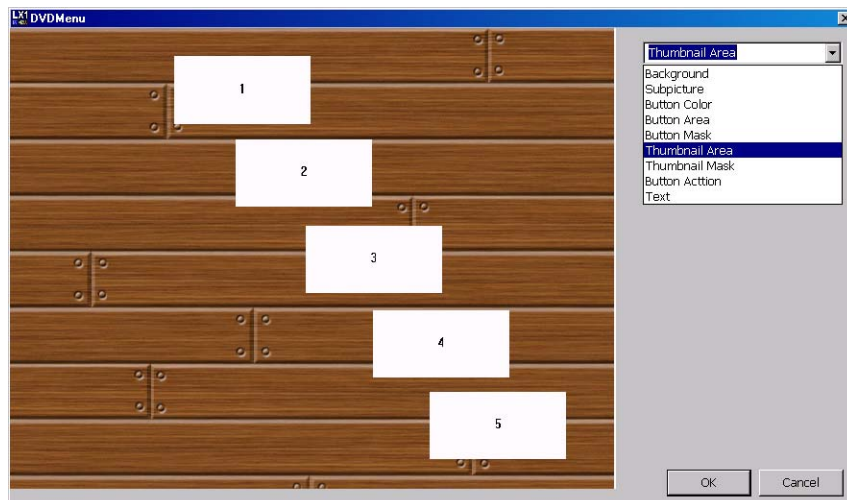
**Button Area** is for preview only, no changes are available  
(this view integrates the Button Image layer)



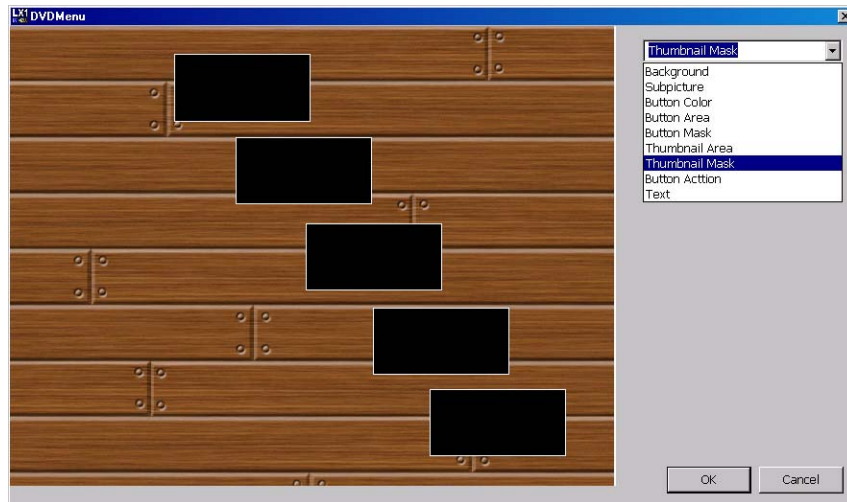
**Button Mask** is for preview only, no changes are available



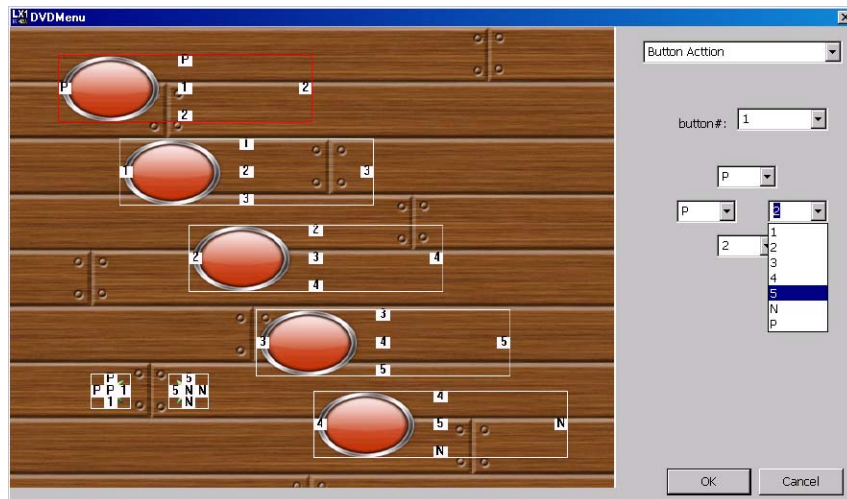
**Thumbnail Area** is for preview only, no changes are available



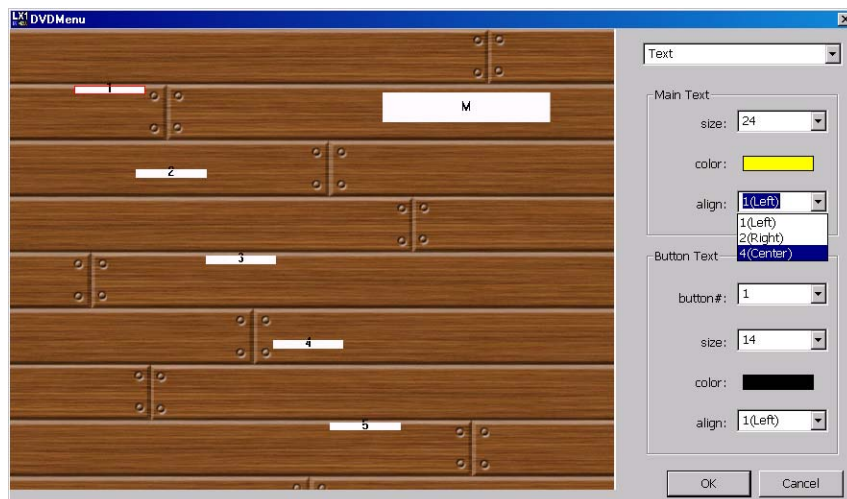
**Thumbnail Mask** is for preview only, no changes are available



**Button Action** allows directional and button advancement order changes



**Text** allows changes to the Disc Title and/or Button fonts when using labels generated from the PRV-LX1 Function Menu



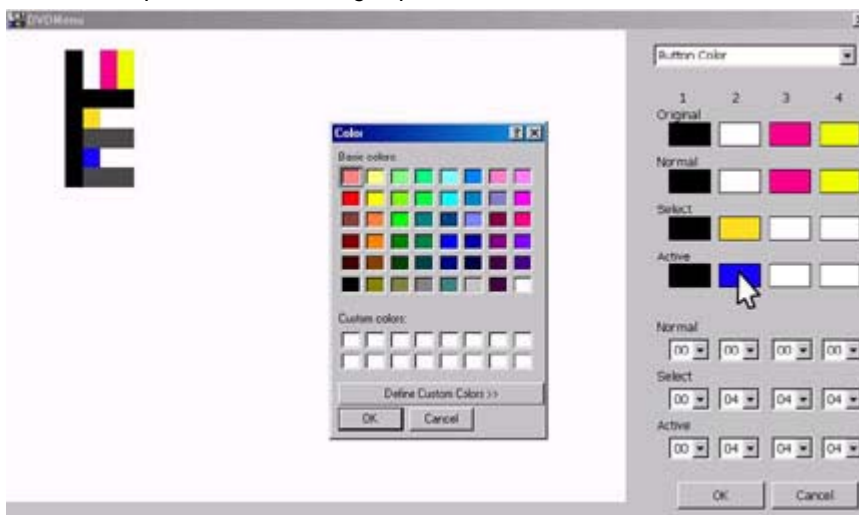


### 8.2.1 Change Highlight Colors from within DVD Menu Maker

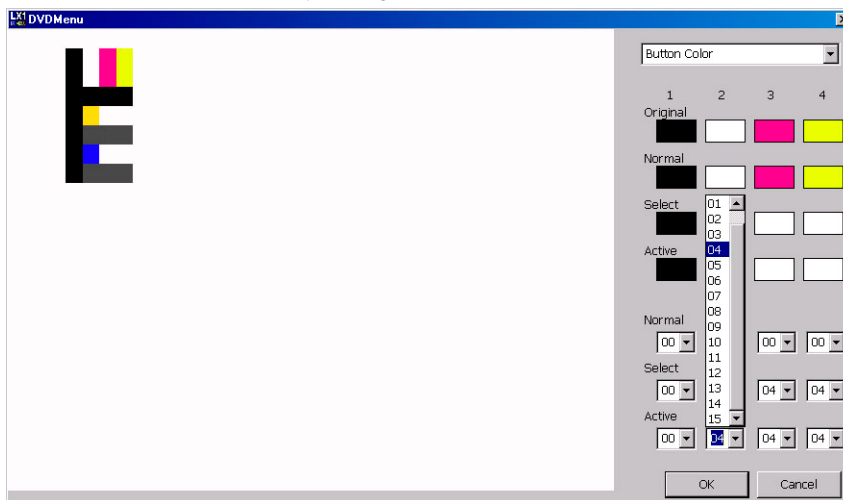
The third preview screen provides a method to change the highlight (Select and Active) colors and shades. Being as the color table is linked to the Subpicture layer, the Original and Normal colors should only be changed on the Photoshop (.psd) file. However, if a Select or Active (action) color clashes with other menu colors, clicking on an action color lets you choose a different shade or another color.

To adjust a color's degree of transparency, use the bottom-right portion of this window. The transparency levels range from 00 (blocks the color from showing) through 08 (50% opacity) to 15 (allows the true color to highlight the button).

*Color Table provides color change options*



*Color Table provides opacity change options*

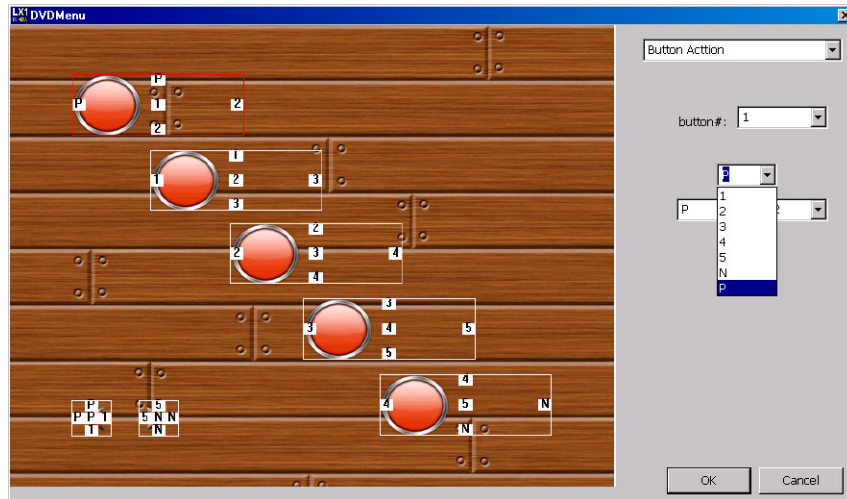


### 8.2.2 Change Button Actions from within DVD Menu Maker

The Pioneer application presets directional arrows for the menu. To set remote control or front panel arrows for different operations, select the button from the drop-down menu on the right then choose the advancement and reverse order. Each button, (including Previous, Next and Top Menu if present) may be independently set.

The following example shows that the active button area includes the rectangular thumbnail that will be part of the final menu.

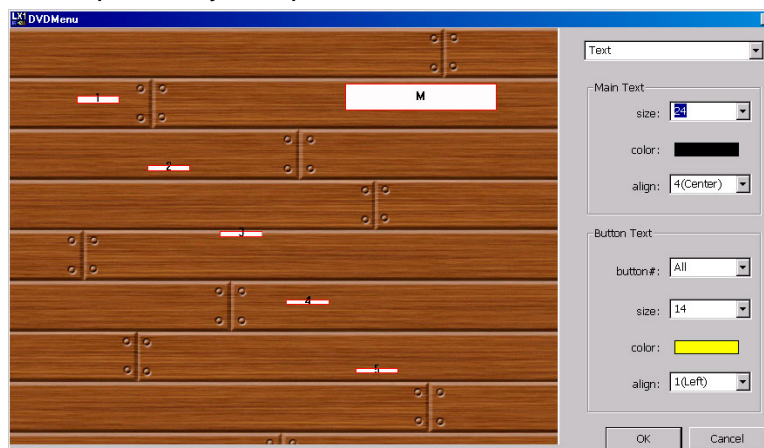
*Button Action allows directional and button advancement order changes*



### 8.2.3 Change Text/Labels from within DVD Menu Maker

Unless the disc title and button labels are part of the background image, the text must be entered through the PRV-LX1 (Function / DVD Menu / Menu Type/Font). The font style is determined by the selected setting but the custom menu application provides a way to adjust text size and color.

**Main Text** refers to the disc title while **Button Text** refers to the buttons associated with video clips (not Previous and Next buttons). To change all button text, select ALL from the Button # drop-down list. Or, each button may be set independently for optimum effect.



*Note: Clicking on the color bar opens a table with selectable colors.*

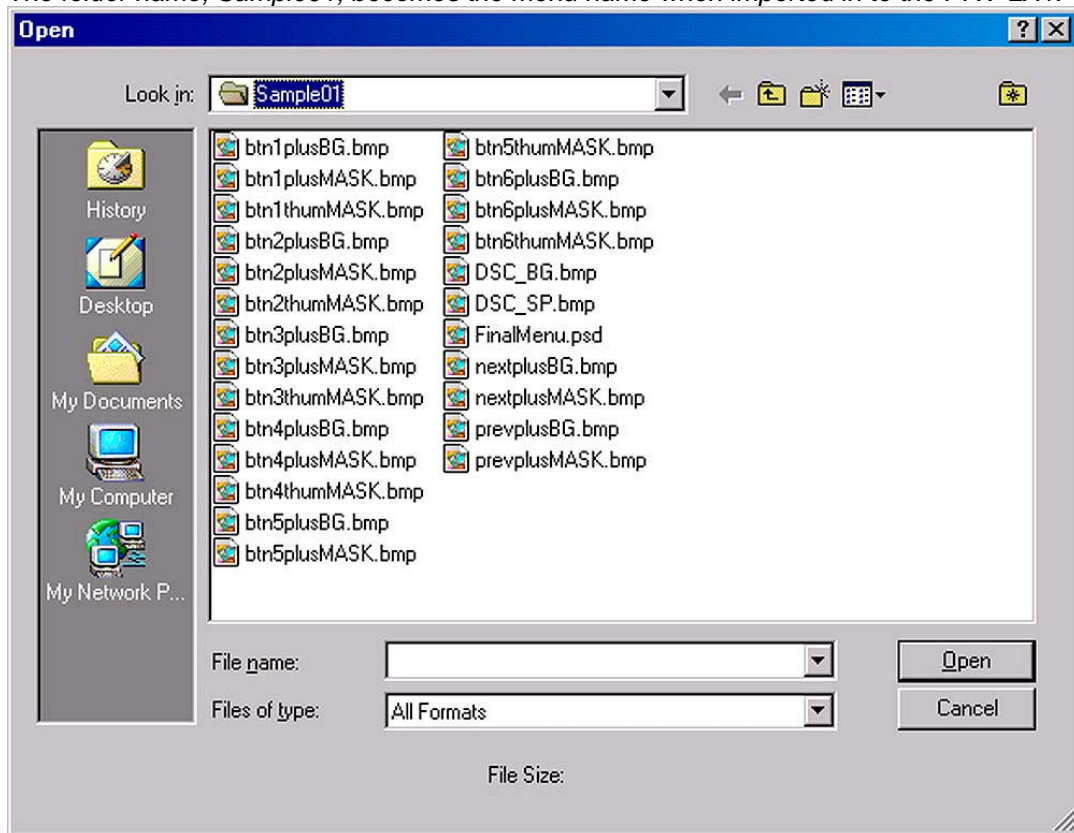
### 8.3 Prepare The Custom Menu For Transfer to the PRV-LX1

Once all modifications have been applied to the preview screens, convert the Photoshop file to a custom menu for the PRV-LX1.

- Click on **OK** to store the menu files in your custom menu folder.
- Copy the custom menu folder to recordable media (CD-R, CD-RW, DVD-R, DVD-RW).  
*The entire folder must be copied rather than individual files in the folder. The folder name appears as a selectable Menu name in the PRV-LX1.*

*Folder with Menu Files*

*The folder name, Sample01, becomes the menu name when imported in to the PRV-LX1.*



### 9.0 IMPORT YOUR CUSTOM MENU

Follow the steps below to import your custom menu in to the PRV-LX1 using a disc. You may also import the folder from a connected PC using FTP to your PRV-LX1. Refer to the PRV-LX1 operating instructions ([Importing Image Data](#)) to import the menu via FTP.

- Insert the CD containing the custom menu folder in to the recorder's drive.  
*If the unit has two drives, either drive may be used.*
- Press the **Function** button on the front of the PRV-LX1.

- 3) Access the **Cpy/Imp/Bkup** option from the App menu section.
- 4) Select **Menu Import** from the menu options.
- 5) Set the following options:
  - Type is **Layout**
  - Source is the drive with the disc (**DVD1** or **DVD2**)
  - Source File is the **folder name**
- 6) Activate the **Add To Library** button.
- 7) Select **Back** to return to the main function menu.

## 10.0 SELECT YOUR CUSTOM MENU

Follow the steps below to select your custom menu.

- 1) Access the **DVD Menu** option under the Edit menu section.
- 2) Set Target to **default**.
- 3) Select the Menu Type for this layout and project (title or chapter).
- 4) Set the Menu Design.  
*Your customer menu folder name appears as a design option.*
- 5) Set the following Menu Modifications:
  - Background is **Default**
  - Image is **Default**
- 6) Activate the **Preview Menu** button.
- 7) Review the menu layout and correct your original Photoshop file if needed.

## APPENDIX A HELPFUL HINTS

This final section deals with common issues you may experience when creating custom menu designs. As you build button layouts, refer to this section for hints or further clarification.

- **DVD Menu Maker or MMH will not launch (open) on my computer**
  - 1 – Verify that the free Quick Time 6 player (from Apple) is installed on your computer.
  - 2 – Confirm that *Picture Viewer* and *File Converter* are included in the installation.
- **Runtime 6 Error – Overflow appears whenever I try to open Menu Maker Helper**

Check the MMH Settings in the registry for the MMH window location. Both MainLeft and MainTop should NOT be zero or a negative value. If either value is zero, manually set the value to 1000 and try launching MMH again.

*HKEY\_CURRENT\_USER\Software\VB and VBA Program Settings\DVD Menu Maker Helper\Settings*
- **Highlight colors are not appearing in the right place**
  - 1 – Review the Highlight Area (Subpicture) and Button Mask layers for proper alignment.
  - 2 – Verify that the color table layer is the top layer in the stack.
  - 3 – Check that the highlight colors within the PRV-LX1's Function menu are set to Auto. If the highlights are still incorrect, manually set your Select and Activate colors through the Function menu/DVD Menu (under Edit)/Menu Modification color selection options.
- **Text characters are being cut off (top, bottom, or sides)**
  - 1 – Check that the text boxes (Text layer) are large enough to accommodate your fonts.
  - 2 – Adjust the font size to work within a smaller space.
- **Thumbnail images are not filling the buttons**
  - 1 – Adjust the color blocks on the Thumbnail Area layer.
  - 2 – Decrease the size of the thumbnail shapes on the Thumbnail Mask layer.
- **Thumbnails are not showing on the menu**
  - 1 – Check the stacking order of the layers.
  - 2 – Confirm that the color blocks on the Thumbnail Area layer are accurate.
- **Thumbnail images are too big/small when compared with the buttons**
  - 1 – Adjust the shapes within the Thumbnail Mask layer to fit the buttons.
  - 2 – Create larger buttons to encompass the thumbnail images.
  - 3 – Modify the shapes for a cleaner, more defined look.
- **Squares (solid or outlined) show around each thumbnail image on the menu**
  - 1 – Check the stacking order of the layers.
  - 2 – Refill the area around the shapes on the Thumbnail Mask layer with Black (0,0,0).
- **Buttons and/or thumbnails are not centered to each other**
  - 1 – Adjust the Button Area-Image-Mask layers to align with the Thumbnail layers.
  - 2 – Adjust the Thumbnail Area-Mask layers to align with the Button layers.
- **Some or all buttons are not showing on the menu**
  - 1 – Check the stacking order of the layers.
  - 2 – Confirm that the color blocks on the Button Area layer are accurate.
  - 3 – Verify that the Button Image layer is built upon a copy of the Background layer.

- **Highlights are not showing on the Previous/Next buttons**
  - 1 – Verify that Previous/Next buttons are part of the Highlight Area (Subpicture) layer.
  - 2 – Check that the Previous/Next button shapes are included on the Button Image layer.
- **Button text/labels are missing**
  - 1 – Enter the text through the PRV-LX1 Function menu/DVD Menu option.
  - 2 – Add button labels to the background if there will be only a single DVD menu page
- **Custom menu or button images are truncated or cut off**
  - 1 – Confirm that the full menu image size is 720 pixels (W) x 480 pixels (H).
  - 2 – Verify that empty areas in each layer are filled appropriately, with Black or White.
- **Thumbnail images are always the first frame from each clip or show as black**
  - 1 – Check that the Thumbnail Area and Thumbnail Mask layers align properly.
  - 2 – A thumbnail defaults as a clip's first frame but can be changed through the Function menu. Refer to the operating instructions for capturing a frame to represent a thumbnail.
- **DVD Menu Maker window disappears after clicking on OK (the program closes)**
  - 1 – If no modifications are required continue with copying the folder to disc.
  - 2 – All modifications have been incorporated into the menu files and the custom menu folder is ready to copy to disc for importation to the PRV-LX1.
  - 3 – Re-launch the menu application and start again if the application was closed in error.
- **Menu Maker Helper freezes and the progress bar stops after I push a button**

A message box should appear telling you to switch to Photoshop because there is a problem. If no box appears, toggle to Photoshop to check for error messages. Usually Photoshop is asking whether you wish to save a background or button template file. Clicking YES saves the modified file so that the issue does not happen again. Selecting NO means the application will freeze at this same place next time you use that button template or the specific background.

To avoid seeing this message, open each file (backgrounds and buttons template) then save to the same folder. Saving a MMH image in the same folder allows Photoshop to recognize the material as an image file with scripting data. This action is only necessary for Photoshop 7.0 users who require the scripting plug-in to operate MMH properly.

- **Button(s) missing from my menu but the button(s) show in PSD file**

When creating your custom button templates avoid anti-aliasing/feathering on Area layers. Before creating your template, set the General Preference for Interpolation to *Nearest Neighbor (fastest)*. This setting reduces but does not eliminate all anti-aliasing. Preferences are accessible from Photoshop's Edit menu.
- **Phantom buttons are appearing on the custom menu**

Sometimes a custom menu with multiple pages can produce shadows of the Normal color as a highlight around non-existent buttons. Change the Normal Color's opacity level to black or create a menu layout with an even division of buttons (i.e. 10 titles with 5 buttons per menu-page).

## APPENDIX B BUILDING A BUTTON TEMPLATE

Although the MMH application provides a selection of button templates, users have the ability to create/add custom button templates to the program. Add your button template to the Button Templates folder under the MMH application folder. The next time the application is launched, the new button template will be available.

The MMH application requires that each layer to be present and correctly labeled. A template is a multi-layer psd file containing the following layers (and/or layer sets) in the exact order listed below: Unless otherwise stated, colors used to indicate shapes or areas are arbitrary.

- Button Text (Test Size Only) [top layer]
- Btn Tmpl
- Prev Tmpl
- Next Tmpl
- Note: ...(example lists Note: Uncheck: "Remove ")
- Menu Title (Test Size Only)
- Title Area
- Color Table [bottom layer]

For a better understanding of button template development, experiment with a copy of an existing MMH button template. Try turning off one or more links within a layer, change some shapes, apply blend properties, create new masks, etc. Once again, DO NOT change the layer order or delete layers.

Follow the instructions below to make a copy of a MMH button template.

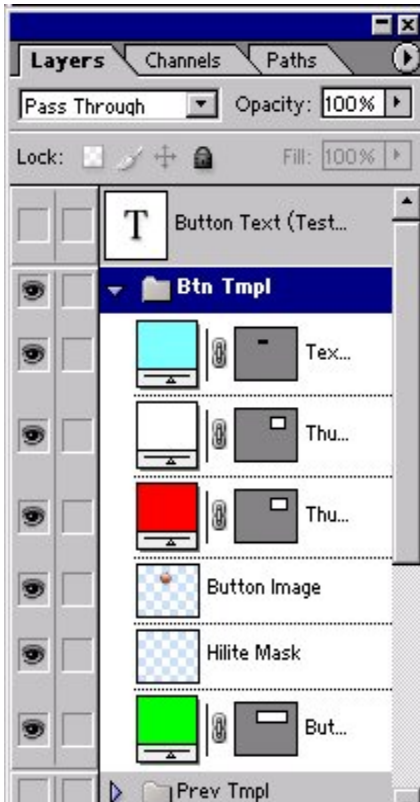
1. Access the *Button Templates* folder under the *Menu Maker Helper application* folder.
2. Open the **Shiny Ring Button.psd** file in Photoshop.  
*Photoshop 7.0 users: accept the vector update when opening this file.*
3. Use the **Save As** command to create a copy of this file to any temporary folder on your PC.
4. Rename this file to **Test-Template**, keeping the psd file extension.
5. Collapse each layer set to the primary layer (named above) but DO NOT change the order of the layers.
6. Practice making changes to the template, paying attention to the layer guidelines below.  
*For clarity, turn off all layers then activate and expand only the layer to be changed.*

### Button Text (Test Size Only)

The purpose of the template's Button Text layer is to check the text size on a button. Although this layer is independent of (not linked to) other layers, it is not rasterized. Do NOT transform this layer. However, as other layer elements are changed or moved, size and location adjustments to this layer may be necessary. Simply use the Photoshop Text tool to decrease or increase the font size or use the Move tool to place the text in conjunction with a button graphic. To change the text color or size, use the text options within the DVD Menu Maker program.

### Btn Tmpl

The mandatory layers within a Btn Tmpl layer set are as follows:

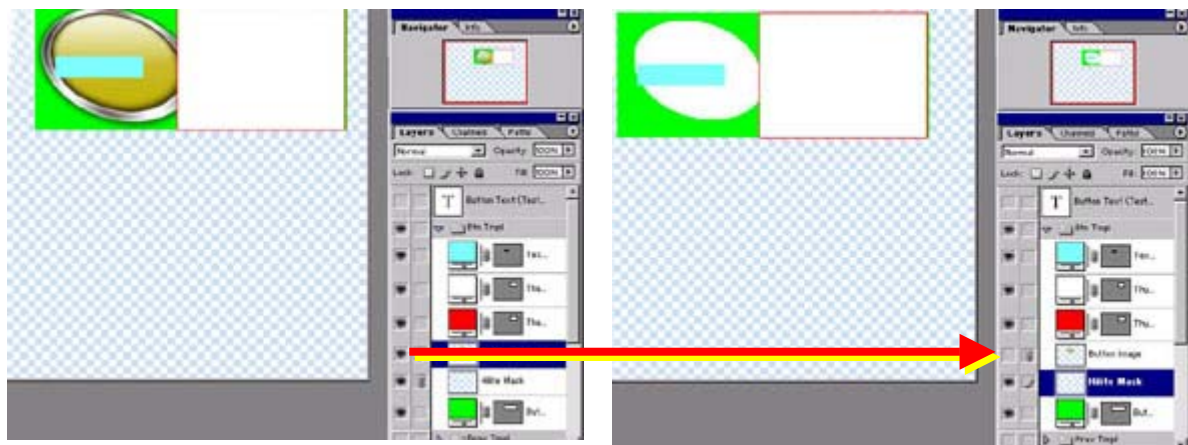


- ← **Text Area** – block indicates where text appears on the button
- ← **Thumb(nail) Mask** – white shape indicates the thumbnail as it appears on the menu (can be any shape but must be white)
- ← **Thumb(nail) Area** – block shows maximum dimensions of the thumbnail image
- ← **Button Image** – graphic of the button
- ← **Hilite Mask** – shape and size of Select/Active highlight; colors must match the Photoshop/Normal color from the Color Tables (sometimes called the Subpicture)
- ← **Button Area** – block shows maximum dimensions of a button

If two or more layers in a layer set are linked then changes to one affects the other(s) unless they are manually unlinked. In the Btn Tmpl layer set the following layers are linked:

- Thumbnail Mask and Thumbnail Area
- Button Image and Hilite

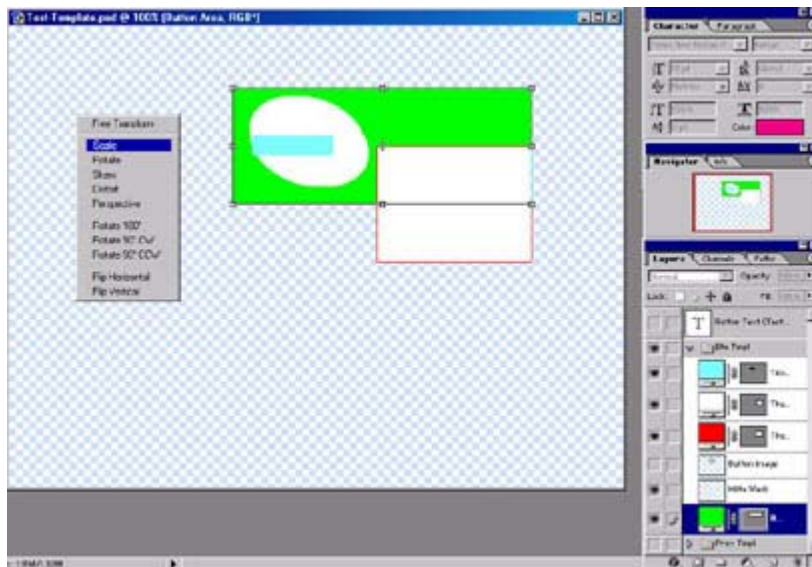
For example, if the button image is skewed while the layer is linked to the Hilite layer, the shape on the Hilite layer is skewed as well.





Try the following manipulation:

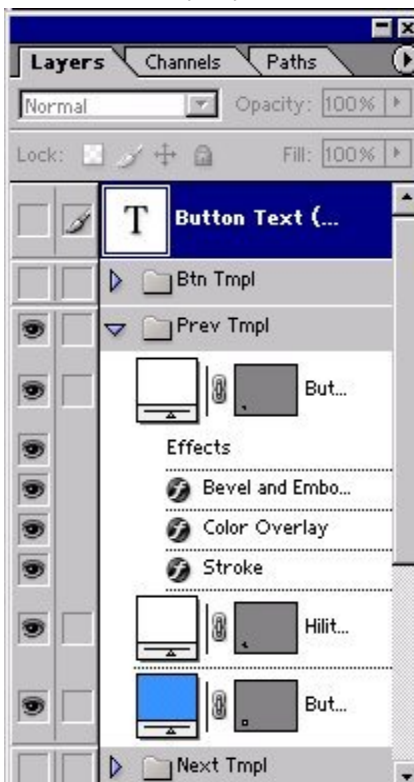
1. Expand the Btn Tmpl layer set.
2. Click on the Thumbnail Mask layer.
3. Move the layer away from the button image.
4. Turn OFF the Thumbnail Mask layer.  
*White disappears revealing the Thumbnail Area block (red in the test template).*
5. Turn ON the Thumbnail Mask layer again.
6. Drag the linked Thumbnail layers down below the Button Area (green block).  
*Because the Button Area layer is not linked to the Thumbnail layers, the button area is not moved or stretched with the Thumbnail layers.*
7. Resize (Transform>Scale) the Button Area layer.



8. Move the Thumbnail layers up next to the skewed Hilite area (green block.)
9. Move the Text Area layer within the Btn Tmpl layer set so that the blue block is centered on the white oval from the Hilite layer.  
*The screenshot in Step 7 above reveals that the button text block is no longer centered for the button image.*
10. Return to the Button Text layer (above the Btn Tmpl layer set) and adjust the font or move the layer as necessary.
11. Turn ON all layers in the Btn Tmpl layer set.
12. Save the modified Test-Template.psd file if you wish.

### Prev Tmpl

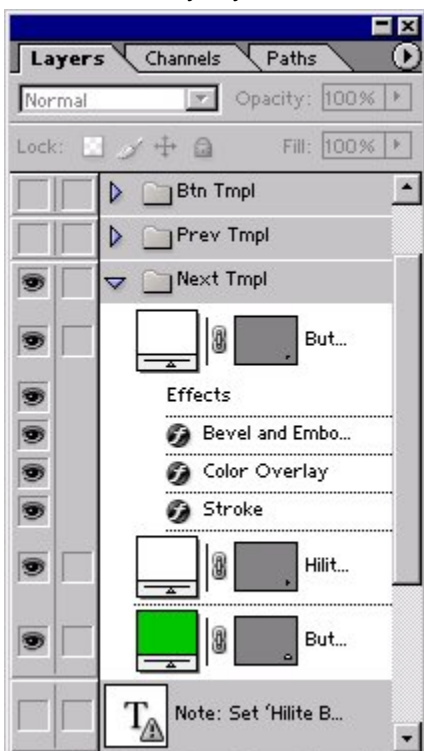
The mandatory layer sets within a Prev Tmpl layer are as follows:



- ← **Button Image** – graphic of the button  
*The Shiny Ring template includes several blending options applied to the Previous button template.*
- ← **Hilite Mask** – shape and size of Select/Active highlight; colors must match the Photoshop/Normal colors from the Color Table (sometimes called the Subpicture)
- ← **Button Area** – block shows maximum dimensions of a button  
*The blue fill color (RGB: 56-145-255) is a button-order color and must match exactly.*

### Next Tmpl

The mandatory layer sets within a Next Tmpl layer are as follows:



- ← **Button Image** – graphic of the button  
*our Test-Template includes the same blending options as the Previous button template; however, this is not a requirement. The Previous and Next buttons can be distinctly different in appearance.*
- ← **Hilite Mask** – shape and size of Select/Active highlight; colors must match the Photoshop/Normal colors from the Color Table (sometimes called the Subpicture)
- ← **Button Area** – block shows maximum dimensions of a button  
*The green fill color (RGB: 0-196-0) is a button-order color and must match exactly.*

**Note: “Remove Hilite from Button Image Area”**

The optional layer, Notes, provides any mandatory Option settings information. The Notes layer on the Test-Template.psd file indicates that the Option, *Remove Hilite from Button Image Area*, needs to be activated for highlighting to appear for the DVD menu buttons. MMH automatically discards this layer during the merging to the final PSD file.

**Menu Title (Text Size Only)**

The mandatory layer, Menu Title, must be present but may remain empty if the Menu Title is part of the Background image. If the Menu Title is entered through the PRV-LX1, the font size is limited by those available on the recorder. Although you may change to any font size on the template, the font size is still limited to those available on the PRV-LX1, (font sizes: 14, 16, 18, 20, 22, or 24). The font face and color may be changed in DVD Menu Maker.

**Title Area**

The mandatory layer, Title Area, must be present but may remain empty if the Menu Title is part of the Background image. If the Menu Title is entered through the PRV-LX1, the Title Area block must be the exact gray fill color listed earlier in this manual (Section 5.1) on the Button Order Chart (RGB: 127-127-127) and be large enough to support the selected font size. If the block is smaller than the font section then the text may appear cropped.

**Color Table**

The mandatory layer, Color Table, has the following specifications:

- Each cell is 20-pixels x 20-pixels
- Left vertical bar (7 cells) must be filled with black (RGB: 0-0-0)
- Third, fifth, and seventh horizontal bas must be a shade of gray
- Layer must be filled with white (RGB: 255-255-255) except for the cells

*Note: Because the Color Table must be mapped to specific pixels, it is simpler to copy the Color Table layer from a proven button template into your custom template.*

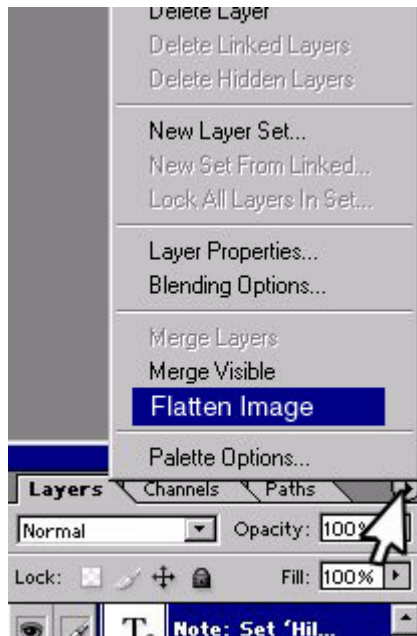
For more information about the color assignments on the Color Table layer, refer to the section [4.1 Making Changes To Highlight Colors](#) in this manual.

**Create a Preview Graphic**

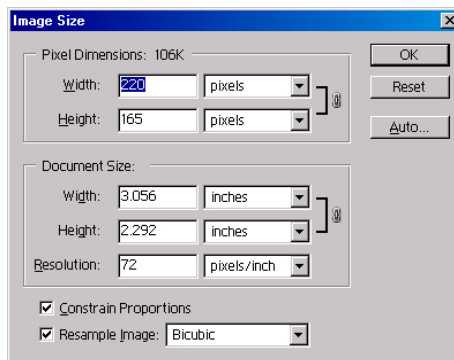
The Menu Maker Helper application automatically creates a preview graphic of new backgrounds and button templates. However, if the button template preview graphic fails to appear in the button template selection window, follow the directions below to create your preview graphic.

1. Launch the Photoshop application.
2. Open your Button Template (PSD) file.
3. Turn ON all layers in the file.

4. Flatten all layers into the Background layer.



5. Access the Image Size dialog box.
6. Set the dimensions to 220 pixels by 165 pixels.



7. Use the SAVE AS command to convert the image to a JPG file and store it in Preview. *Leave the PSD file in the Button Template folder but store the new JPG file in Preview (folder under the Button Template folder). For continuity, keep the PSD and JPG file names the same.*

There are certain colors that assign button sequence. Using these colors on the Color Table can cause MMH to create faulty menus.

***DO NOT*** have the following colors on your Color Table:

Access Order	Color	Red (R)	Green (G)	Blue (B)
Button 1	Yellow	239	253	0
Button 2	Orange	249	100	4
Button 3	Red	218	0	18
Button 4	Pink	243	0	137
Button 5	Purple	85	0	169
Button 6	Dark Green	0	105	0
Button 7	Brown	84	45	2
Button 8	Cream	250	206	151
Button 9	Tan	200	155	100
Button 10	Bright Green	33	255	146
Next Button	Green	0	196	0
Previous Button	Blue	56	145	255
Disc Title	Gray	127	127	127

Files may be downloaded from the Business Products Support section of the Pioneer website (under the *Service & Support* tab). Select the *DVD Players & Recorders* option then choose PRV-LX1. Manuals are under **Documents** and free applications are under **Utilities** on the Support page:

[http://www.pioneerelectronics.com/pna/links/list/0,,2076\\_4247,00.html](http://www.pioneerelectronics.com/pna/links/list/0,,2076_4247,00.html).

Additional product information is available from the main Pioneer website:

[www.pioneerelectronics.com](http://www.pioneerelectronics.com)

For help with this procedure or other PRV-LX1 questions please contact a Pioneer Service technician (800) 421-1613, sales & technical staff ([CA] 310-952-2000 or [NJ] 201-327-6400) or send an email summarizing the situation to <mailto:LX1-help@pioneer-usa.com>

## **PRV-LX1 Professional Recorder**

Menu Maker Helper Operating Instructions

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