



The AVID MARQUEE Title Tool

*An Introduction to using the Marquee titler
with the AVID Media Composer editing system*



Developed by Paul Sampson

Marquee Course Breakdown

Introduction.....	6
Module 1. Introduction to Marquee	7
Getting Started and Tour.....	8
The Marquee Environment	10
Making a simple title	14
Modifying a simple graphic	25
Previewing a Title	26
Saving a Title	29
Exercise 1: Creating a basic graphic.....	34
Module 2. Quick Titles enhances a Basic Title	35
Introduction to Quick Titles.....	35
Master Opacity	36
Main Surface	36
Drop Shadows.....	43
Adding an Edge.....	47
Module 3: Toolbox Buttons	52
The Monitor Window in detail	53
The Full Toolbox	61
Module 4: Toolbars.....	64
Customizing the Toolbars	64
Module 5: Property Viewers.....	73
Managing Property Viewers	73
The Transform Property Viewer.....	74
Info Property Viewer	76
The Text Property Viewer	76
The Layers Property Viewer.....	77
Module 6: Shadows.....	81
The Shadow Types.....	82
Module 7: Lighting	84
Enabling Lighting	85
Light Types	86
Common Mistakes with Lighting	88
Module 8: Surfaces	90
Introduction.....	90
An object has surfaces	91
Using the Surfaces Property Viewer.....	92
Selecting surfaces of you shape	93
SOLID COLOR type Surfaces.....	93
TEXTURE type Surfaces.....	96
GRADIENT type Surfaces	98

Module 9: Libraries.....	99
Textures.....	100
Materials	101
Styles.....	102
Templates	104
Scripts	105
Inside the Libraries: Library Folders	107
Saving and applying Library Elements.....	108
Promoting Title Tool Styles to Marquee	109
Adding Graphics to your Marquee Title.....	110
Module 10: The DVE.....	112
Module 11: Rolls, Crawls, Path Text.....	116
The Four Title Types	116
Setting Title Durations in Marquee.....	119
Rolling Titles	120
Crawling Titles.....	124
Text on a Path	127
Module 12. Animation	131
Introduction.....	131
Animation Mode	132
Timeline Animation	133
Working With Keyframes.....	137
Controlling Keyframe Velocity	139
Animation Tips	141
Keyboard Shortcuts.....	144

Course Outline

The course runs from 9: to 5:30 pm, with one hour for Lunch, and two 20 minute breaks, one in the morning and one in the afternoon.

TOPIC	TIME	Content
Start- 9:00		
1: Introduction		
2: Quick Titles to enhance a graphic		
3: Toolbox Buttons		
4: Toolbars		
5: Property Viewers		
6: Shadows		
7: Lighting		
8: Surfaces		
9: Libraries		
10: The DVE		
11: Rolls, Crawls and Path Text		
12: Animation		
Finish – 17:00		



**AVID Marquee Default screen layout
(The basic Toolset)**

Introduction

The Marquee Title tool is one of two titling tools present in Avid editing applications- the other is the original Title tool familiar to avid editors for many years.

While the original title tool has provided many years of service to editors around the globe, the Marquee title tool offers many more enhancements and capabilities that allow an editor to create titles quite a bit more sophisticated and elegant than the original Title Tool.

Why bother learning Marquee? One reason is that it will do so much more than the standard title tool. For example, the Marquee Title tool has these advantages:

- Full scenes may be created in 3D space, and objects may have true 3D rotations
- Extrusion allows titles to be created with depth
- Libraries allow the saving and re-use of work
- Textures can be applied to surfaces
- Animation may be applied to all objects in your scene
- Shadows can be created in many varieties
- Edge Treatments may be applied for rounded, beveled and other edge shapes
- Text may be attached to paths (shapes) the operator creates
- 3 dimensional objects (DVE's) may be incorporated in your scenes

Making The Change

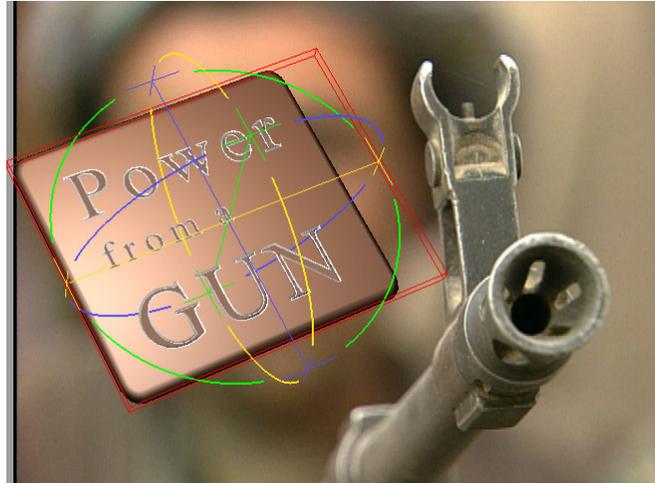
Moving to Marquee need not be a difficult task. You can begin using Marquee as a very simple tool, as simple in fact as the original title tool. This is possible because a single window in Marquee – the Quick Titles window, allows you access to almost all the controls of the basic title tool in one place. You can quickly learn to use Quick Titles and be producing graphics with the same look, and speed, as in the standard Title Tool.

As your experience grows, and you begin to look deeper into Marquee, you can begin to take advantage of more options for surfaces, textures, shadows, extrusions, rotations, libraries and more. Your understanding of Marquee can grow at your own pace!

You will also discover that Marquee is for more than text. Its simple geometric shapes can be extruded into basic, but full 3D models. It can create animated backgrounds over which your text may be placed. It can even be used to create animated effects by loading up images and font and animating them on the screen.

Module 1. Introduction to Marquee

The Marquee Title Tool is a very powerful program which allows you to create very sophisticated titles. Marquee supports the creation of many types of objects, not just text. These objects can be positioned and oriented in 3D space. Lights can be created in this environment, shining on your objects. Rolls and Crawls are supported. You can add textures to objects. And when it's all done, you can animate every object – including the lights!



While Marquee is certainly used for making titles, its 3D object and animation capabilities make it much more than just a title tool. It is used to create animated logos, show openings and even complex effects.

The Marquee Title Tool can be used on several different levels. In this course, we begin by exploring its basic features in this module, and learn about its more sophisticated features in later modules. In this module, the emphasis is on how simple it can be to create a basic title with Marquee.

Objectives

At the end of this module, you will be able to:

- Start Marquee from within the AVID application, and switch between the two
- Choose the title tool you wish to use as a default user setting
- Identify the windows visible in the *Basic* toolset
- Select and modify different Toolsets
- Create a basic title, including adjusting kerning, leading and Paragraph attributes
- Modify a basic title
- Preview and save a completed title
- Modifying and promoting a title to Marquee

Getting Started and Tour

The Marquee Title Tool is tied to the Avid editing application. It needs to be launched from within the editing system. Once started, Marquee opens as a separate program on your computer, and you can the switch back and forth between the Editing application and Marquee as desired.

OpenGL Support

Marquee requires the use of an OpenGL Graphics card. If you attempt to open Marquee without this monitor support you will get an error message and Marquee will not open. When running on a two monitor system, the left (bin) monitor is often the only one running with OpenGL acceleration. In this case most of the Marquee windows must be kept on the left (bin) monitor or they will not draw properly. Remember this if all of a sudden your Preview, Surfaces or Timeline window will not update – the number one cause is having that window on the wrong monitor!

Starting Marquee

Marquee and the regular title tool are started in the same way.

To open the Marquee Title Tool

► Choose **TOOLS > TITLE TOOL OR CLIP > NEW TITLE** from the menu in the editing application. You may also assign the Title Tool button  from the Command Palette to your keyboard for quicker access.

If you have chosen the Marquee Title Tool as your default Title Tool, it will open up. If you have chosen the standard Title Tool as your default, it will open up. If you have chosen neither of these as your default, you will see the following New Title dialogue box.



You may click on the title tool you wish to use. In this case the next time you open the title tool this dialogue will open again. If you select Persist, the choice you are about to make becomes the default Title Tool, and this dialogue box will not appear next time you open the Title Tool.

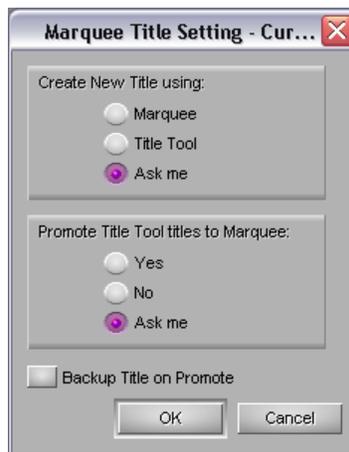
Changing the default Title Tool

If you have chosen Persist in the New Title selector, you have set the default title tool for this user. The New Title dialogue will not appear any more, and the editor will not be offered the opportunity to choose between the two Title Tools.

In this case, the editor can access the Marquee Title Settings to turn the New Title dialogue back on, or to set the other Title Tool as the default.

To change the default title tool:

► From the Project Window, select the Settings tab, and double click on the Marquee Title Settings



At the top of this settings window:

- Choose *Marquee* to make the Marquee Title Tool the default.
- Choose *Title Tool* to make the standard Title Tool the default.
- Choose *Ask Me* to re-activate the New Title dialogue box to appear each time you access the title tool.

Switching between Marquee and the AVID

As you work, Marquee can be left open for faster access. You will be switching between Marquee and your Avid Editing application regularly. You may do this to quickly make titles, or simply to reposition the play head on your Sequence monitor to change the reference frame in Marquee. In any case, fast switching between the two applications will be necessary.

To switch between the two applications:

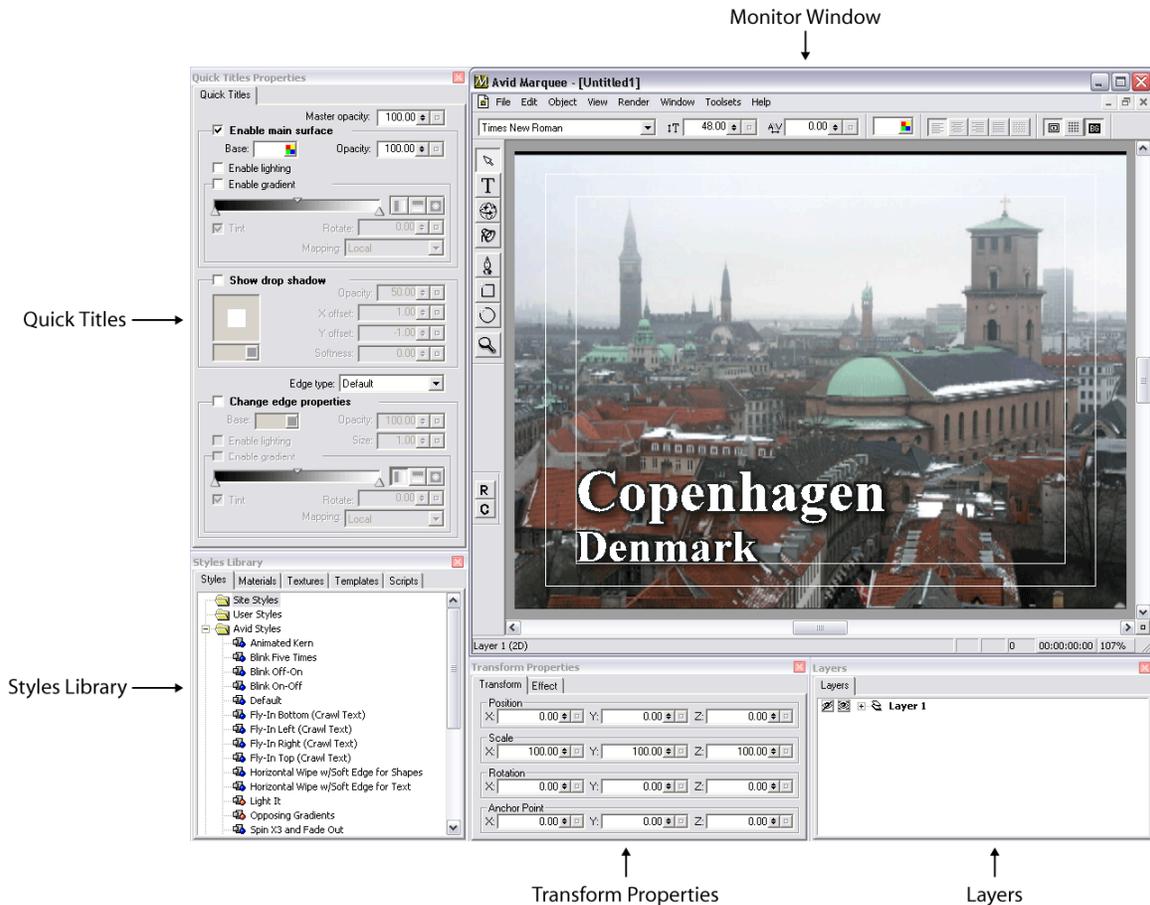
To switch between the AVID and the Marquee Title Tool:

- Click between the AVID and MARQUEE buttons in the Windows taskbar.
- Hold Alt and press TAB to cycle between applications.
- Click on any visible portion of either application.

The Marquee Environment

Marquee starts up with an array of windows on the screen. We will be exploring most of them in detail, but to help you get your initial bearings, here are the windows you see upon startup. Refer to the larger image on page 2 for a better view of the Marquee default screen.

Note that there are many other buttons and windows that are hidden in this default view. These include buttons for object alignment, frame alignment, layering, locking, and accessing views. There are also special windows (Property Viewers) which will later allow much more control over Shadows, Lights, Surfaces, Textures and much more. We will see how to turn these on later.



Monitor Window

This is the window in which you will perform many of your titling tasks. You will type here, but also directly apply transforms (change title position, rotation, etc), select and align objects, position lights and much more.

The image you see here can be a 'viewers eye view', as shown here, or one of several alternate views which show your text and graphic objects from different positions in 3D space.

Attached to the Monitor Window are the Menubar and Button Bar (top), Toolbox (left), Status Bar (bottom) and a Scroll Bar (right).

Quick Titles Properties

If you only create simple titles, most of the features you need are located here in this combination palette. Here you can make changes to the surface, Shadows and Edges of basic titles.

The options here are accessible, but limited. For more sophisticated work, you will use the specific property viewers for each attribute. For example, there is a separate, more fully featured Shadow property viewer.

Layers

For very sophisticated animations, you may wish to access and manipulate *parts* of your graphic individually. The layers palette lets you monitor and manage the large number of individual objects which might be found in a sophisticated title. It allows you to select and manipulate objects which may be hidden from view.

Transform / Effects

Here are two Property viewers (palettes) nested into one. Each is accessible through a separate tab. The transform palette is for accurate, numerical manipulation of objects. The effect properties viewer is used to add edges and extrusion to your selected object.

Templates Library

This is a tabbed window holding five different palettes: *STYLES / MATERIALS / TEXTURES / TEMPLATES / SCRIPTS*. These are used to add presets settings and looks to titles, and also allow you to save your own work as presets for re-use.

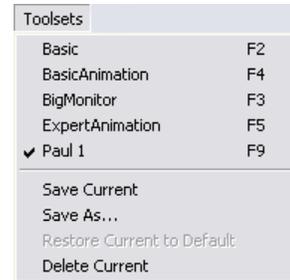
Marquee Toolsets

Marquee is a sophisticated environment, and no single screen layout will suit all tasks or all users. That is why Marquee supports Toolsets, the ability to quickly switch the screen display between several preset, or user defined displays. Each Toolset remembers what windows were open on the screen, how large they were, and where they were located.

From the menubar you can access the four preset screen displays

- Basic F2
- Basic Animation F4
- Big Monitor F3
- Expert Animation F5

Each of these has an equivalent F key assigned for faster switching. The last item in this list, “Paul 1”, is a user created screen layout.



To switch between toolsets:

► Select the desired toolset from the Toolset menu, or press the appropriate Function key.

To Modify an existing Toolset:

- Select the Toolset you wish to modify
- Rearrange the screen as desired
- From the Toolset Menu, select *Save Current*

To create a custom toolset:

- Rearrange the screen display as desired
- From the Toolset menu choose *Save As...*

To delete a Toolset:

- Select the Toolset you wish to remove from the menu
- From the Toolset Menu choose *Delete Current*

Making a simple title

Our first title will be created using only the initial, visible controls in Marquee. As mentioned earlier there are lots of other controls we will be using later, but for now we will see the speed and ease of use in Marquee by creating a basic title.

Starting a Title

Open MARQUEE and it assumes you want to make a title that matches your current project- 4x3 or 16x9, SD or HD, with your chosen frame rate and Frame size. If you want to create a title of another size, choose FILE > PREFERENCES > CURRENT TITLE and on the first tab you can choose the title format you wish to create. This allows you to create titles in multiple formats without needing to change projects.

Basic Title Settings in the Toolbar



Start at the top of the screen by setting the basic font parameters for the characters you are about to type. Later on, we will be adding more buttons (Toolbars) to this button bar.



Any font installed on the computer will appear in this list. After selecting one font the list selector will remain highlighted. You may use your UP and DOWN arrows to select other fonts, or press a letter to scroll to the first font whose name begins with that letter. To apply this font to any highlighted letters, or to choose it for the next letters you type, press ENTER.



- Click and edit numbers into this field.
- Double click to select entire number for replacement, then type a new value

- Drag up or down on the on the value shuttle . You may hold CONTROL while you drag a value shuttle for finer adjustments, or hold SHIFT while dragging the value shuttle to snap to usefull intervals.
- Click RESET  to restore the default of 48 points

The units of measurement by default in Marquee are points. You may also switch this to Pixels or Percentage of screen height in your preferences (FILE > PREFERENCES > CURRENT TITLE > USER INTERFACE tab. The default size is 48 points, and 48 points = 10% screen height = 48 pixels. Internally, marquee remembers fonts as a percentage of screen height, so that if the frame size changes, the font is still the same proportion of the screen height that it started as.

KERNING

This adjusts distance between letters. If you use this control on a text block, the kerning of all letters will be changed at once. Some manufacturers call this Tracking.

Using Kerning Text Field:

If you already have typed your letters with the text tool, swipe a block of letters to kern multiple letters at once or Swipe a single letter to adjust the space to its right only. Then:

- Click and edit numbers into this field.
- Double click to select entire number for replacement
- Drag up or down on the on spinners ,
- Click RESET  to restore the default of 0.

Using The Keybord Shortcuts:

Position the text cursor between two letters, then:

- Use ALT + LEFT arrow to move the characters closer together
 - Use ALT + RIGHT arrow to move he characters further apart
-

COLOR

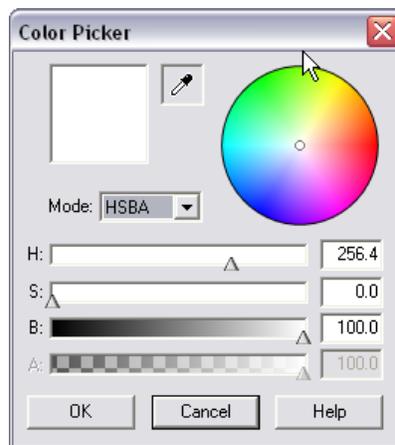


There are four ways to select color.

- Click on the four-color button  to see a selection of colors you can choose from. Simply run your mouse over these swatches to choose a color.



- Click on a color from the spectrum  at the bottom of the palette
- Click on the eye dropper  at the bottom of the palette (and hold your mouse button down) as you drag over the monitor window and select a color from it.
- Click on the Color Picker button  to open the Color Picker. You can also open it by double clicking on the color sample swatch next to the four-color button.



- Start by selecting the way you want to choose your colors – HSBA or RGBA. HSB stands for **H**ue, **S**aturation and **B**rightness, and is a more intuitive interface for choosing colors by eye.
- Adjust the appropriate sliders to mix your color. Alpha is available only when choosing colors for Gradients.

ALIGNMENT



Initially, these buttons are greyed out. They will become active after you create or select a text field.

Alignment is relative to where you first click- not to the screen itself. The edges of the text are adjusted relative to their column borders. It is possible to have more than one column on screen. Your choices are, from left to right above:

LEFT




CENTRE




RIGHT




JUSTIFY




EQUAL
SPACE




SAFE TITLE

Safe Title and Safe Action are turned ON and OFF by this button. The safe action area (the outer box) is the region within a frame where action is guaranteed to be visible on television displays. The safe title area (the inner box) is the region within a frame where title objects are guaranteed to be readable on television displays.

Later on when we do alignment, it is important to know that if safe area is turned ON, alignment is relative to TV safe (inner box). If Safe Title is OFF, alignment is relative to frame edges.



GRID

This grid appears only in the Monitor window, it does not show on Output. It creates a 16 x 12 grid, and shows dots at the intersection of the grid lines. The lines themselves are not visible.

When the grid is on, objects will snap to the grid when you drag them.



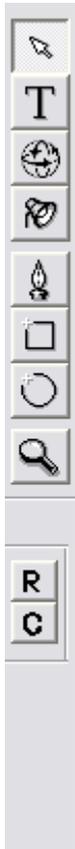
BACKGROUND

Normally, you see the image in your Editing Application's recorder as a reference image behind your text in Marquee. This button will hide that reference image and show you the text over a black background. The visibility of the background image or animation also controls its appearance in previewed and rendered frames.

To change your background image: switch to your editing application, move the recorder's play head to the frame you wish to see as a background in Marquee, and then return to Marquee to see your updated image as the background.

Using the ToolBox

The ToolBox is the button bar found on the left side of the Monitor Window. The default ToolBox is called the *Simplified* ToolBox and has 8 buttons. Below it are the Roll (**R**) and Crawl (**C**) buttons. We will explore all the buttons in more detail later when we turn on the *Full* ToolBox which adds four more buttons to the ToolBox. For now, we will simply identify these 8 buttons and their keyboard shortcuts:



-  **E** Edit Used for selecting, moving and manipulating objects in the monitor widow
-  **T** Text Create and edit Text blocks
-  **R** Rotate Rotate objects
-  **L** Lighting View and edit scene lights
-  **S** Shape Create vector based objects through Bezier drawing
-  **M** Rectangle Click and Drag to create rectangular shapes on-screen
-  **O** Ellipse Click and drag to create elliptical objects on-screen
-  **Z** Zoom Click in the Monitor Window to zoom into your image. Hold CONTROL or ALT while you click to zoom back from your image.

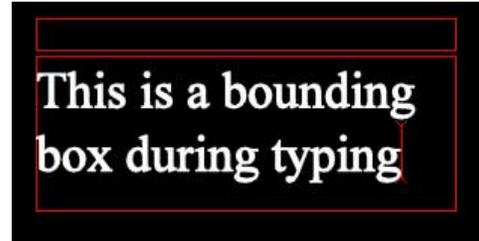
Notice as you hold your mouse over each button a Tool Tip will identify the button, and remind you what the Keyboard shortcut is for that button.

Creating your on-screen Font

To create our first title, select the Text Tool from the Toolbox. You may wish to use the keyboard shortcut **T**.

Click in the Monitor Window at the position you want to place your type.

A RED text bounding box appears. This double box indicates you have a text field ready for typing. The TEXT JUSTIFICATION controls which were previously grayed out are now active. Select your alignment and type your desired letters.



To complete the text entry, click with the mouse outside the current text field, or choose another tool from the Toolbox.

Paragraph font and Leading

Click and Drag with the text tool to create a bounding box rectangle which will contain what we now call Paragraph text. This text will word wrap to match the width of your text field. As before, changing the bounding box width will change the wrapping of the text.

Pressing ENTER as you type does not technically create a separate paragraph. ENTER creates a line break, in which the distance between adjacent lines is identical.

Press SHIFT + ENTER to create a new paragraph. There is different spacing between paragraphs than between lines – usually a paragraph break has more space between paragraphs. After entering a paragraph break, you will be able to take advantage of paragraph spacing and alignment adjustments.

Changing font Leading

Leading is the distance between lines of text. This can be set on a paragraph by paragraph basis. Proceed as follows:

- Select your paragraph(s). Position the cursor within the paragraph you wish to adjust. If you want to adjust multiple paragraphs at the same time, swipe multiple paragraphs in the same container with the text tool. The shortcut CONTROL + A will select all text in a container.

- Hold ALT and use the UP arrow to decrease the distance between lines of text.
- Hold ALT and press the DOWN arrow to increase the distance between lines of text.

Changing Paragraph Spacing

Changing the distance between individual paragraphs is possible if you pressed SHIFT + ENTER between paragraphs. If this has been done, you may adjust paragraph spacing as follows:

- Position the cursor within the paragraph you want to adjust the spacing *after*. If you want to adjust multiple paragraphs at the same time, then use the Text tool to swipe multiple paragraphs.
- Hold SHIFT + ALT and use the UP arrow to reduce the space after the paragraph(s)
- Hold SHIFT + ALT and use the DOWN arrow to increase the space after the paragraph(s).

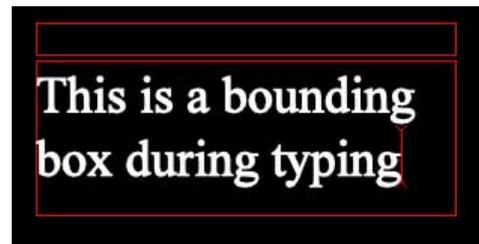
Changing font Kerning

As mentioned earlier, this may be done using the kerning text field in the monitor window, or may be done using the following procedure:

- Position the text cursor between two letters, then:
- Use ALT + LEFT arrow to move the characters closer together
- Use ALT + RIGHT arrow to move the characters further apart

Font Bounding Boxes in the Monitor Window

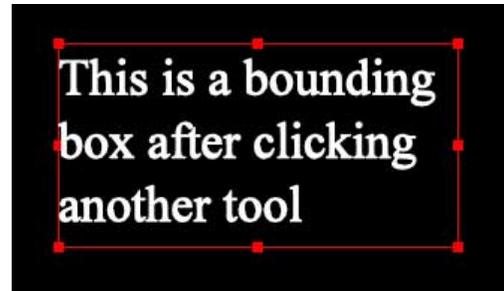
This is the bounding box you saw earlier when you typed your original font. It is created by clicking with your font tool in a blank space on your Monitor Window, or by clicking inside some existing font in the Monitor Window. It indicates you are ready to type more font into this text field. The second red box at the top is called the 'top bar' and is for visual reference only. You will also see a text cursor, the insertion point, present in this bounding box.



Select the EDIT tool (E) and click on any text field (or indeed any object) to see this bounding box and its adjustable handles.

In this case it indicates a selected text field, but not one in which you are typing. With Font, the bounding box handles may be manipulated to change some word wrapping, positioning and gradient settings.

Many people are bothered by the fact the bounding box may not always encompass the font within it. For example, if you enlarge text after typing it in, the bounding box does not resize with the font. This is because normally there is no direct correlation between bounding box size and font size. The bounding box can change other aspects of the font other than size (such as word wrapping controlled by bounding box width).



Changing the bounding box size on its own does not change the font size.

You can resize the bounding box (with and without rescaling its contents) using the following shortcuts:

► **To change Bounding Box size only:**

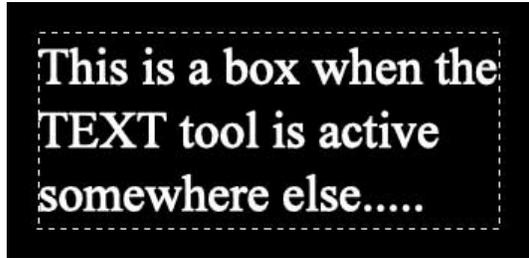
- Change bounding box width to change word wrapping. You are resizing the container but not its contents.
- Change bounding box height to set reference for some alignment functions. You are resizing the container without effecting its contents.

► **To change the bounding box size and Rescale its contents as well:**

- ALT + Drag bounding box to freely resize the font. You are Rescaling the container contents.
- SHIFT + ALT + Drag to rescale the font while constraining font aspect ratio – no distortion will be applied to the font.
- CONTROL + drag to rescale the container and its contents from the anchor point, which by default is the centre of the object

This third bounding box appears when the text Tool active, and the text object is not selected.

As soon as you chose the text tool all the text objects on the screen identify themselves by showing this bounding box, making it easy for you to find the text objects on the screen.



Bounding Box Review:

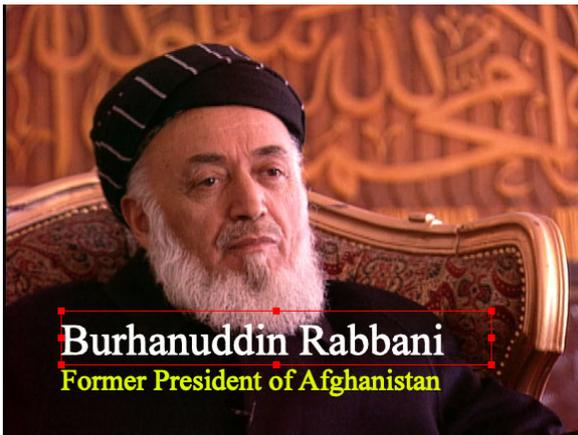
As a review, here once again are the three different Bounding Box styles just presented. In all cases, nothing is selected on the screen as we begin:



Select the Text tool (T), and all text fields in the Monitor Window are identified with the dashed bounding box



Choose the Text tool (T) and Click (or click and swipe) on any font on the screen, and this red bounding box with a top bar appears to indicate this field is active for typing



Select the Edit Tool (E) and click on any on-screen font (or other object) and this red bounding box appears. The object may now be moved, or the bounding box resized.

Modifying a simple graphic

Changing your font

After creating the initial graphic, we may want to modify any or all of the settings we have already made. Generally, changes to your text will be made in one of three ways:

- Use the EDIT (**E**) tool to select a full text block and then change attributes to apply changes to that entire block of text
- Use the text tool (**T**) and swipe a group of characters and then apply changes to the selected characters
- Use the text tool (**T**) to position the cursor inside a text block and change the text attributes for the characters you are about to type at that position

Repositioning Objects on screen

This is simple and intuitive. Use the EDIT tool to click on the object to make its red bounding box visible.

- Drag the object to a new position
- Hold SHIFT as you drag to constrain the motion to straight horizontal or vertical motion.

For more accurate positioning, you can use the arrow keys on your keyboard.

- Press the arrow keys to nudge the object Up, Down Left or Right in single pixel increments.
- Hold SHIFT as you use the arrow keys to nudge by smaller increments for more accuracy.

Previewing a Title

While you are working in Marquee, you do not always see the title the way it will look when rendered out. The Monitor window does not show your TV Safe colors, and it does not anti-alias edges and extruded objects. The monitor window can also have its quality level set so you can work more quickly (at lower quality) or more slowly (at higher quality). All these factors can result in the title you are looking at in the Monitor window not displaying its true quality. While everything will look fine when the title is sent to your editing system, you may want to preview the results in Marquee first.

We are going to look at how to set the Monitor Window display quality, and then how to preview the title in the Preview window.

To Set the Monitor Window On-Screen quality

You can change the on-screen quality of objects in the Monitor window by adjusting the quality level. Decreasing the quality level improves the responsiveness of moving and editing objects, but at the expense of visual accuracy. Increasing the quality level improves the visual accuracy of objects, but at the expense of responsiveness. The Quality setting does not affect the rendering quality. To adjust the quality of rendered frames, use the settings in the Render Options dialog box.

► Select **VIEW > QUALITY** and choose the level of quality for the Monitor Window to use. The choices are:

Low Produces lower-quality objects and draws the quickest of the available levels. The outlines of objects appear faceted. Use this quality level when you need the quickest response time (feedback) and are not concerned with the visual accuracy of the objects.

Medium Produces average-quality objects. The edges of objects are antialiased (smooth). This setting is the default and is sufficient for most titles. Use this quality level as a starting point.

High Produces higher-quality objects but might take longer to draw on screen, especially if motion blur is enabled. The edges of objects are antialiased. Use this quality level when you need the highest level of visual accuracy or realism.

! WARNING: The Preview window, and many property viewers in Marquee require OpenGL graphic support. On some computers, this may be available on only a single monitor in a two monitor system. In this case, the Preview, and most of the Property viewers must be viewed on the OpenGL capable monitor.

To Preview a Title

- In the case of an animated title, position the Play Head in Marquee at the frame you want to see previewed. We will look at how to do this when we discuss creating animations.
- Initiate the render by choosing **RENDER > PREVIEW**, or use the keyboard shortcut **CONTROL + /** *when the monitor window is active*.. The Render Progress dialogue box appears. For a static title, the render is quite quick.



- When done, the Preview window opens and the rendered frame appears.



The finished title in the Preview window can be viewed several different ways. In particular, you may wish to view its Alpha Channel directly with the following shortcut:

To preview the Alpha Channel of your title

- Before you preview your title, ensure the Background button  in the Monitor window is off. You will see your title over black instead of seeing it over the reference frame from your editing system.
- Initiate your preview with RENDER > PREVIEW or use the keyboard shortcut CONTROL + /
- When your rendered title appears in the Preview window, press SHIFT + A to toggle between your title and its alpha channel.



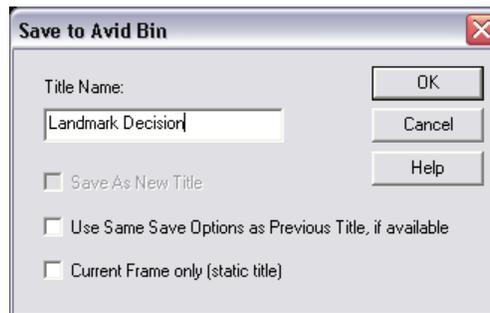
Alpha Channel

Saving a Title

When your title is complete, we will be saving it. Marquee titles can be saved in two different ways. They may be saved directly into an AVID bin (title with media), or may be saved without media as Marquee .mqp files. Also in each case you can select SAVE or SAVE AS. SAVE AS allows you to save the title with a new name, SAVE will overwrite an older version of the title if it has already been saved.

To save a title with media to the AVID bin:

Select FILE > SAVE TO BIN or use the shortcut CONTROL + B. FILE > SAVE ALL TO BIN is available if you have multiple titles open and wish to save them all to the bin.



- Type the file name in the Title Name field
- (Option) If you are saving only the current frame from a rolling, crawling, or animated title as a static title, select "Current Frame only (static title)."
- (Option) Select or deselect "Use Same Save Options as Previous Title, if available". This is selected if you have already saved a title to a bin during this session. When this check box is selected, the title is automatically saved in your editing application using the same bin, drive, and resolution settings as the previous save.
- Click OK

Basic titles usually render quickly. More advanced titles, especially animated titles, will take longer to render. You can cancel the render at any time by clicking Cancel in the Rendering Progress message box. When the Rendering Progress message box disappears, your AVID editing application will appear. If it does not, switch to your Avid editing application, as described previously. The Save Title dialog box is open in the editing application.



In the Save Title dialog box, do the following:

- Choose a bin, drive, and resolution from the pop-up menus.
- Select or deselect Fast Save (Unrendered), depending on your needs. When Fast Save (Unrendered) is selected, the title clip is created in the bin but title media is not generated. You must create title media at a later point in your workflow. This allows for the faster creation of titles, and they can have their media created later (CLIP > Create Unrendered Title Media).
- Click Save

Saving a title without Media: MQP files

If you have a lot of titles to create you may wish to speed up your session by making and saving the titles without media. You may then initiate the creation of title media at a later time when it is more convenient. This will allow you to work faster at the title creation stage.

Titles without media are saved as separate files with the Windows extension .mqp. These files are very compact, and can be shared among editors with ease. For example, a sample title could be emailed to another editing facility as an .mqp file, where it would be opened from within Marquee and the saved to a bin.

To save a Title without media:

- ▶ Select FILE > SAVE if the title has not yet been saved, or if you wish to save over an earlier version. Select FILE > SAVE AS if you want to save the title under a new name.

To open an .mqp file:

► Choose FILE > OPEN from within Marquee. In the File Open dialogue box navigate to the .mqp file and select it. Click OK.

Once you have opened the .mqp file, you may use FILE > SAVE TO BIN to create a clip and media in your bin.

Unlike the regular Title tool, Marquee allows you to have many titles opened at the same time. You can use the FILE > NEW and FILE > OPEN command multiple times. If you have multiple files open you will want to switch between them.

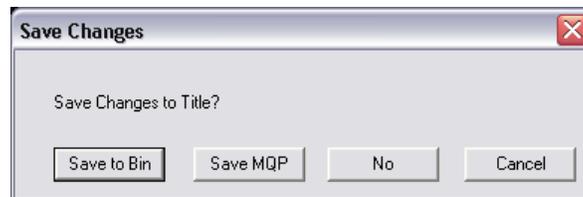
Switching between titles:

► From the bottom of the WINDOW menu chose the name of the title you wish to see

Closing a Marquee title:

► Select FILE > CLOSE

This will close the current title but leave Marquee open. Closing a title which has not been saved with all current changes will call up the Save Changes dialogue:



- Save to Bin will save a clip and media to the bin you choose
- Save MQP will save a marquee .MQP file only, no clip or media will appear in the bin
- No will close the title without saving it
- Cancel will leave the title open

Exiting Marquee

Select FILE > EXIT, will close Marquee and offer to save any open titles as it closes.

Modifying and Promoting Titles to Marquee

It is possible to modify a title after it has been created. If that title was originally created with the regular Title Tool, you can modify it in either title tool. You may modify it using the regular Title Tool in which it was originally created (don't promote the title), or you can promote it to Marquee, and have access to all of Marquee's advanced features as you edit the title (promote it).

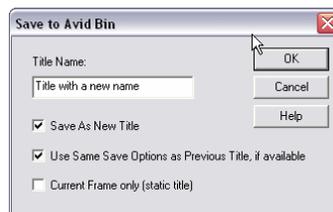
! WARNING: Once a title has been promoted to Marquee, it can no longer be opened in the standard Title tool. This may be an issue on a show shared by several editors if they do not all know how to use Marquee.

To modify (*and replace*) a title in the bin:

► Control + Double Click on the title icon in the bin. Edit and save the new version of the title. The original title in the bin is replaced, although if it has already been edited into the timeline, it remains unchanged there.

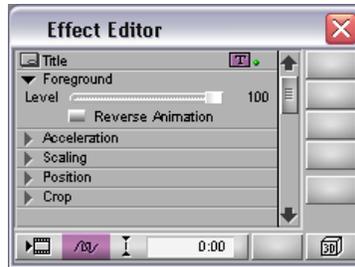
If you don't want to replace the title in the bin, but want to create a separate version, do one of the following:

- Duplicate the title in the bin (select it and choose CONTROL + D) to create a duplicate which you will not modify.
- When you SAVE TO BIN from Marquee activate the "Save As New Title" checkmark in the *Save To Avid Bin* dialogue.



To modify (*and create a duplicate*) of a title in the Timeline:

► In the Effects Palette, click on the Options button –  to the left of the word "Title". The title tool opens and you may edit and save the new version of the title. In this case, the title in the timeline changes and a new title appears in the bin. The original title in the bin is not replaced.



Choosing to Promote the Title or not

When opening a Title Tool title for editing using either of the previous methods, you will be offered the opportunity to Promote the title, which means to convert it into a Marquee title. This is done in the Edit Title dialog box. The title will look the same on screen, but will be modified in Marquee instead of the standard Title Tool.



- Chose *Yes* to open and edit Title Tool titles in Marquee
- Chose *No* to open Title Tool titles in the standard Title Tool
- Check *Persist* to have your selection become the default, and this question will not be presented to you any more.

If you choose *Persist* and wish to change your mind later on, you can change the Edit Title dialogue back to *Ask Me* in the Marquee Settings discussed previously.

Also in the Marquee Settings you may activate *Backup Title on Promote*. This will create an unrendered version of your original Title Tool title, append the characters [TT] to it, and then open the original in Marquee for modification.

Exercise 1: Creating a basic graphic

Students will:

- Create a simple graphic in Marquee
- Preview the actual graphic quality in Marquee
- Observe the Graphic's Alpha channel in Marquee
- Save this graphic to their bin ready for use in the Avid
- Save the same graphic as an .mqp file
- Revise the graphic by opening it from the bin
- Revise the graphic a second time, by opening the graphic from the effects editor

Module 2. Quick Titles enhances a Basic Title

Objectives

At the end of this module, you will be able to:

- Use Quick Titles to modify the Main Surface of an object
- Use Quick Titles to add a drop shadow to an object
- Use Quick Titles to add an edge treatment to an object

Introduction to Quick Titles

Most titles will need to be more sophisticated than the ones we made in the last module. Specifically, they may require the use of opacity controls, gradients, lighting, drop shadows and edge treatments.

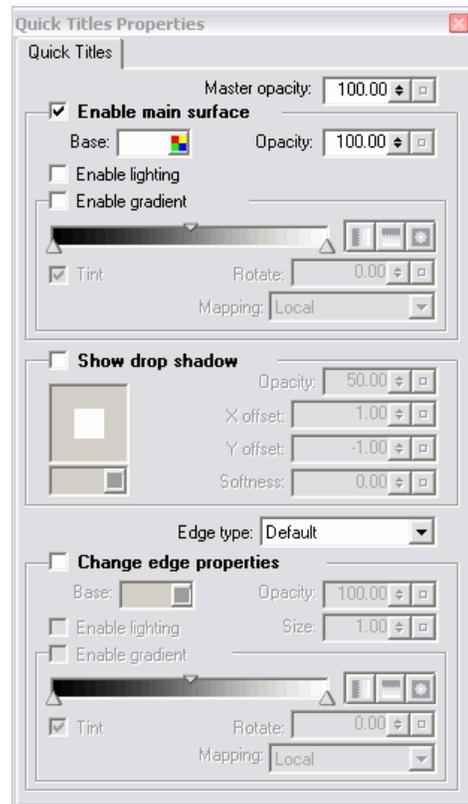
All these features are available in a basic form in the Quick Titles window. As stated previously, many of these features are also available in their separate Property viewers in which there are many more options than we will see in Quick Titles. Still, Quick Titles allows for rapid access to the most commonly used controls.

There are four distinct areas of the Quick Titles window:

- Master Opacity Control at the top right
- Main Surface Controls adjusts the fill of the letters
- Drop Shadow Controls
- Edge Properties allows the creation of borders and various edge treatments

To use any of the controls in the last three sections you need to activate that part of the window by adding a check mark beside its name.

Enable main surface

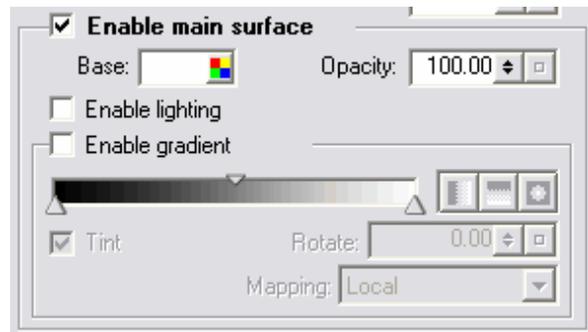


Master Opacity

This control adjusts the opacity of the selected object. If you look closely at the Quick Titles you see there are four opacity controls. This one is the Master, meaning if you adjust it you are changing the opacity of the letters, their fill and their edge treatment at the same time. You can use this control to fade the entire object up or down. The other three opacities only affect their category. For example, the Drop Shadow opacity only adjusts the opacity of the shadow.

Main Surface

The 'Main Surface' is essentially the fill of the letters.



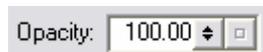
Base



This is the base color. The control will look familiar because we saw it earlier in the Toolbar at the top of the monitor window. It works the same way here too.

One thing to note- it is called Base Color for a reason. When you create a gradient, it may be mixed with or 'tinted' by the base color. The base color is added to your gradient. The same effect is present when using Textures- the base color will tint the texture. If you don't want any of this tinting, then make sure the base color is white!

Opacity



This changes the opacity of the fill only. If you set it to 0 you will still see the shadow, and the border or edge treatment.

Creating the outline of a letter would be done by setting the opacity to 0 on font with a border.

Enable Lighting

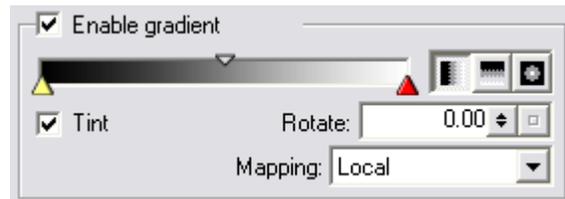
Enable lighting

Turning this on allows the position, intensity and color of the lights in Marquee to be applied to the fonts main surface (fill). Clicking this button turns on a single, default light. It is positioned in the upper left of the Monitor window. Other lights (up to 8) can be added to the scene and controlled with the Lighting Properties Viewer.

Enable Gradient

Enable gradient

Activate this option to apply a gradient to the surface of the selected object. After activating this check box, you can choose start and end colors for the gradient, and the mid point of the gradient. You can change gradient direction, color, opacity. You can add as many as 8 “color stops” to the gradient.



Setting Gradient Colors



The ramp, by default from black to white, shows the colors being used to create the gradient. The two triangles under the ramp are the ‘color stops’ where you define the gradient start and end colors. Each gradient must have at least two color stops. To change the color of a color stop:

- Double click on the color stop to open the color picker we used earlier
- Right click on the color stop to access the color menu

The small triangle at the top of the gradient is used to set the midpoint of the gradient between two color stops. It is called the Color Weight.

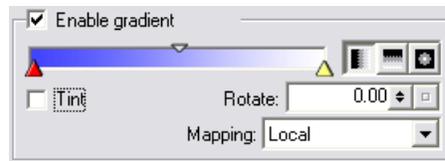
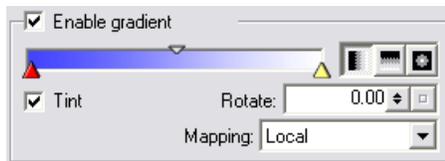
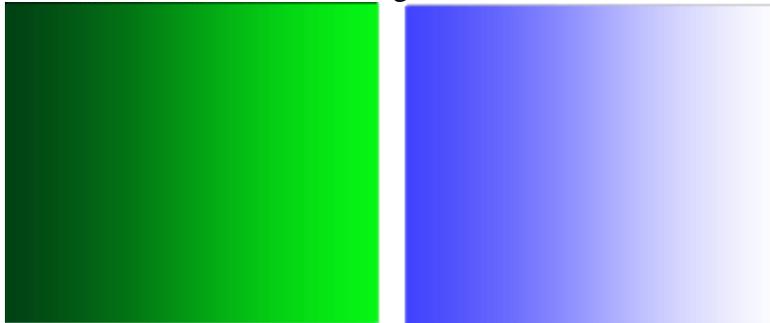
To add more color stops to your gradient:

- ALT + CLICK below the gradient

Tinting a Gradient

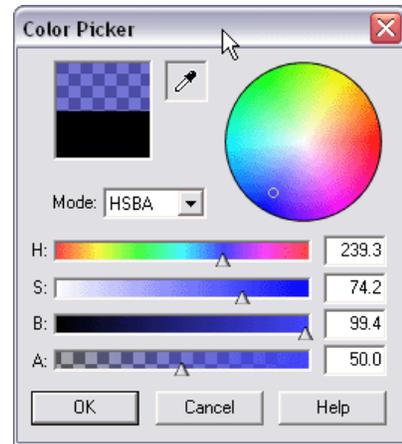


The tint checkbox is the control which applies the base color as a tint to the gradient. Here we see a blue to white gradient, both with a green tint (left) and without tint (right). If you don’t want the base color to affect the gradient, be sure to leave Tint off.



Gradient Transparency

Color stops in a gradient have the ability to remember not just color but transparency values as well. Here is the color picker for a gradient. The alpha is adjusted with the bottom ramp in this palette, labeled 'A', currently set at 50%. Notice the sample swatch at the top of the palette which shows the results of this setting: blue with transparency.



Gradient Color Picker

Gradient Direction



These three buttons allow you to choose the direction of the gradient.

- ▶ If you click the button a second time, it will reverse the direction of the gradient.



Horizontal



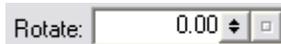
Vertical



Radial



Gradient Rotation

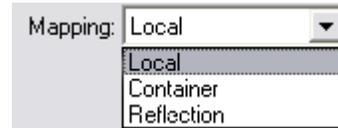


Horizontal and Vertical gradients may also be rotated to any angle using this control.

- Type in a number of degrees by which you want to rotate the gradient
- Click and drag on the value shuttle
- Click on the reset button to reset the rotation to 0

Container Mapping

Gradients can be mapped (applied) to objects in one of three ways. You can choose Local, Container or Reflection mapping. Reflection mapping is not very effective with a gradient and would usually be used with a texture.



Local Container Reflection

Local

Gradient is applied to each object in a container (each letter in your text) individually

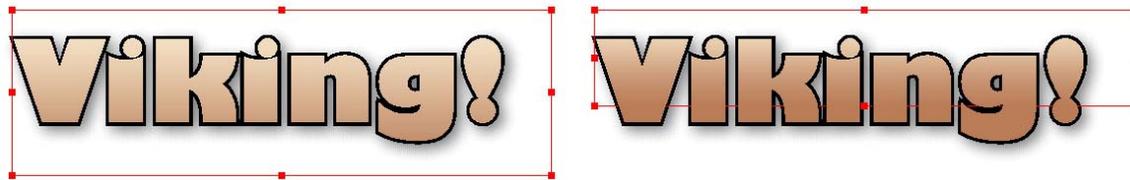
Container

Gradient is applied to all objects in the container (all letters in your text) as if they were one object

Reflection

Gradient is applied as if it were being seen as a reflection on the surface of your object. Gradient is enlarged and softened as a result

Adjusting Gradient Distance



For a container gradient, you can adjust the distance over which the gradient is applied to the container. This is done by changing the size of the container bounding box, as shown above.

Gradient Review

Now that we have explored the parts of the gradient palette, here are the steps for preparing a gradient:



Activate ENABLE GRADIENT



Select gradient type, Horizontal, Vertical, Radial .
Notice the gradient is applied to each letter individually. This is a LOCAL gradient



In most cases, we want a gradient that fills all the letters (fills the *container*) uniformly. Select Gradient Mapping – LOCAL, CONTAINER or REFLECTION. This is a CONTAINER gradient.



The gradient may be rotated using the ROTATE control



The position of the gradient center point may be adjusted by dragging the top triangle called the color weight.

The position of the gradient START or END point may be adjusted by dragging either of the bottom triangles, called color stops.

ALT + CLICK below this gradient to add other colors – color stops – to your gradient.



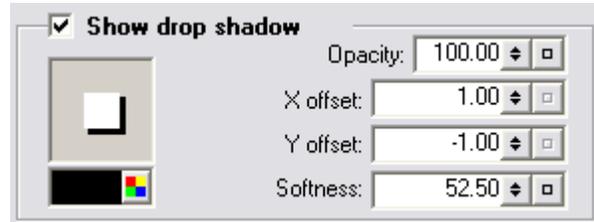
To select Gradient colors, RIGHT CLICK on a color stop to see the Color Menu, DOUBLE CLICK on a color stop to get the Color Picker.

Drop Shadows

Enable Drop Shadows

Show drop shadow

Click this checkbox to activate the following drop shadow controls.



Shadow Tool

The white square represents your object. Click and drag on the white square and the shadow will begin to drag from underneath it. Drag the shadow into its initial position this way.

Opacity

Adjust this for the desired shadow opacity. You can type in an opacity value, use the value shuttle, or use the reset button.

X and Y Offset

For precise and repeatable shadow offsets, use these controls to position the shadow under your object. X offset controls left-right movement. Y offset controls Up-Down position.

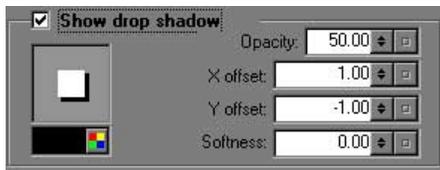
Softness

This control is used to adjust the shadow edge. A higher number is a softer edge.

Shadow Color

This control adjusts the color of the drop shadow. Black is the default color. It is used the same way that all other similar color controls we have looked at are used.

Shadow Review

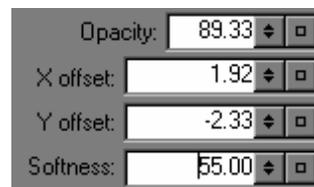


The drop shadow appears, and may now be adjusted.

Activate SHOW DROP SHADOW check box



The shadow position may be adjusted as on the Media Composer, by dragging the shadow out from behind this white box. The Shadow Position may also be changed numerically using the X Offset (left/right position) or the Y Offset (up/down position). You can make these X and Y adjustments using the value shuttles , or return to the default values using the reset buttons .



The shadow Opacity and Softness may also be adjusted using numbers, value shuttles or the Reset button.



Shadow color may be adjusted with the Color Picker or the Color Menu, as shown previously.

A drop Shadow with an offset of 0 is of course a glow!

Adding an Edge

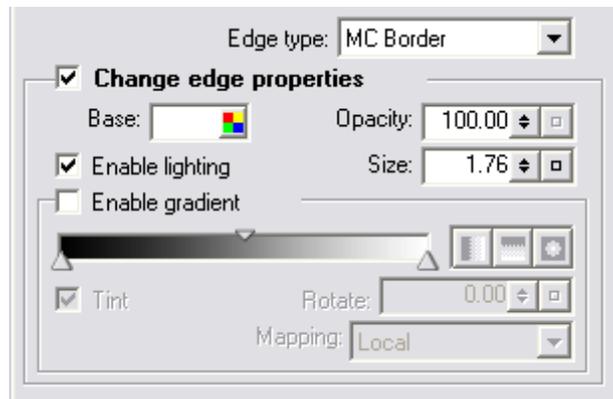


Enable Edge Properties

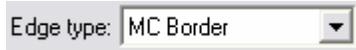
Change edge properties

Activate edge properties to add these edge treatments.

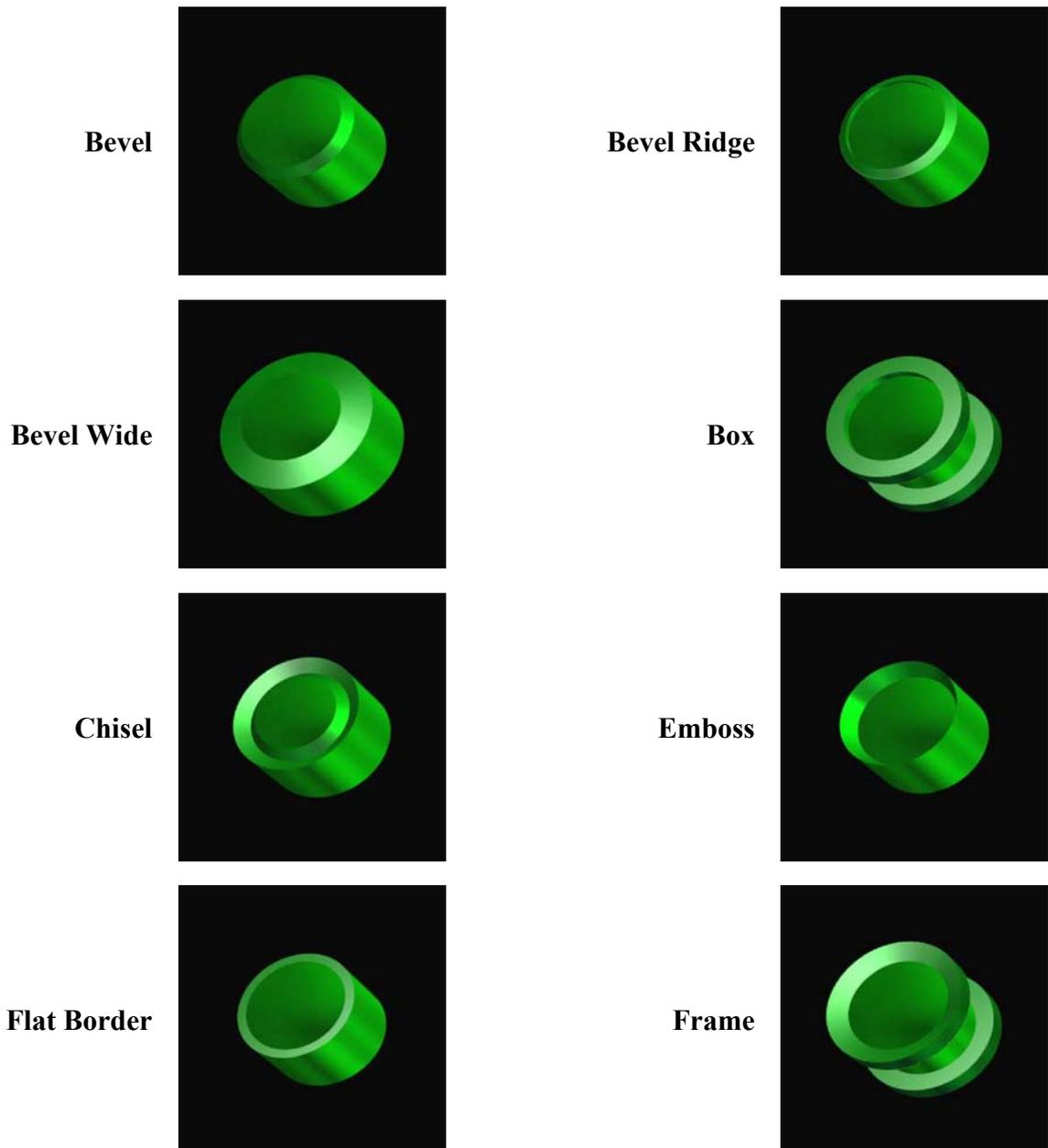
Marquee Quick Titles offers many choices for edge treatments. You can add a simple border (called MCBorder), or more sophisticated edges (such as Round, Neon, Emboss or Ridge). A Rounded edge is shown above.



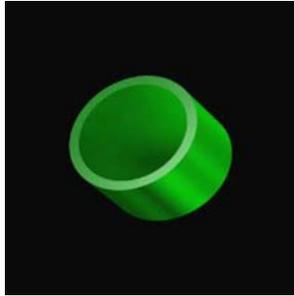
Edge Type



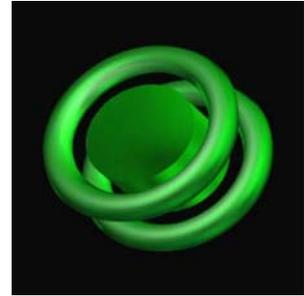
Here you choose the edge type. The default is *Default* and is in fact no border at all. MCBorder is a simple border, similar to a standard Title Tool Media Composer Border—hence the term MCBorder. Other edge treatments provide a wide variety of ‘looks’ for your lettering and other objects, as shown below:



MC Border



Neon



Ridge



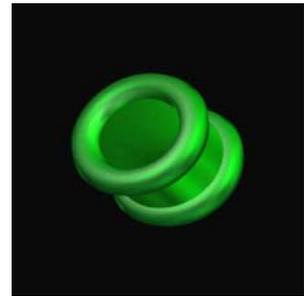
Ridge Inset



Round

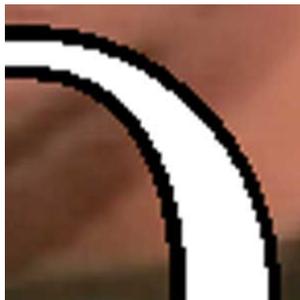


Tube

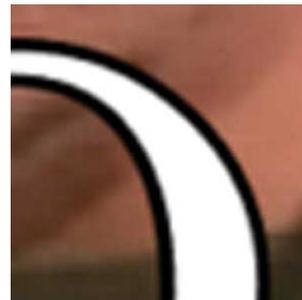


▶ Enable Lighting must be on for an edge to be seen properly. Without a light on the object, there is nothing to show up the new edge shape. Always use 'enable lighting' with edge enhancements.

▶ All edges are shown as aliased in Marquee. To see an anti-aliased edge, preview the title (Render > Preview OR CONTROL + /)



Aliased edge seen in Marquee



Same title shown in Preview Window

Base Color



This control adjusts the color of the edge. White is the default color. It is used the same way that all other similar color controls we have looked at are used. In most cases, the edge color you choose should match the Main Surface color, so the lettering appears to be made of a single, solid color.

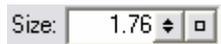
- ▶ The sure way to copy an objects Main Surface color to an edge color is to use the eyedropper to sample the main surface color swatch in the Quick Titles window. The swatch is a pure color, while the on screen main surface may be under the influence of lights which change its brightness.

Edge Opacity



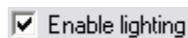
Adjust this to change the edge opacity only. For some edges, such as emboss, this softens the look of the edge effect.

Edge Size



Adjust this to change the edge size. For a regular border, this is border width. Similarly, for other edges, it is the width of the edge effect.

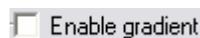
Enable Lighting



On its own, this enables the single local light. For edges this is very important. If you don't turn on the lighting, you will see the edge as simply a fattening of the letters.

- ▶ Always use the Enable Lighting with edges so you can see them properly.

Enable Gradient



As with the Main Surface, mentioned earlier, these controls will apply a gradient to the edge. They work the same as the Main Surface controls.

Exercise 2

The students will create a title graphic which contains the following elements:

- A Gradient
- A Drop Shadow
- A treated edge

Kerning and Leading of the graphic will also be required.

Module 3: Toolbox Buttons

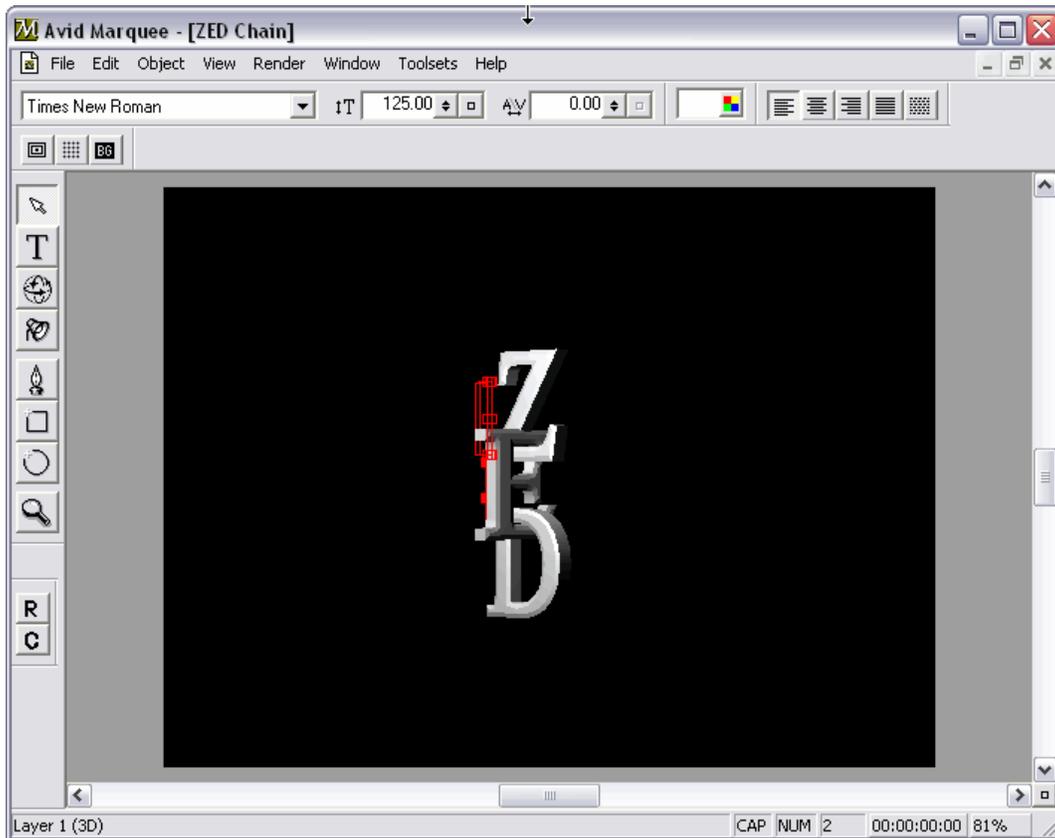
We've already done a lot with Marquee, and we haven't even looked at all the toolbox buttons yet! In this section we will catch up on the Monitor Window controls, the buttons at the top of the monitor window and the Toolbar along the left of the Monitor Window. Finally, we will begin to explore some of the extra windows or pallets – called 'Property Viewers' – that offer much more control over every aspect of your title. You may have made a shadow, but the Shadow Property Viewer gives so many more options!

Objectives:

At the end of this Module you will be able to:

- Identify all parts of the Monitor Window, including the Status Bar
- Use all the buttons in the Simple Toolbox
- Activate the Full Toolbox and identify the four new buttons
- Use Drawing Tools to create Shapes

The Monitor Window in detail



The monitor window is where we have been creating our type. It is here we directly apply changes to our objects- select them, rotate, reposition, align and distribute them. The monitor window has several views, adjustable magnification and a Status bar at the bottom to provide valuable feedback.

We will be looking more closely at the toolbar at the top of the monitor window, the Status bar at the bottom, and the Toolbox button bar) at the left side.

Status Bar

Starting at the bottom of the Monitor window, we have the status bar. From the left, we have the following indicators:

- Messages- this one identifies the current layer as a 3D layer
- CAPS LOCK on/off
- NUM LOCK on/off

- Number of selected objects
- Current park position – When you are creating animated scenes, click and drag on this number (scrub) to move along the default 5 second timeline
- Current Magnification – click here for a popup you can use to choose other magnifications

Notice the button at the right of the status bar, just above it . This button will reset the Monitor Window to the “Scene View”. It will show the entire scene in the Monitor Window from the point of view the audience will see it.

More Simple Toolbox buttons

While we named all the buttons in Module 1, and learned how to use the Edit and Text tool, there are many more to explore. Here we will be looking at what the other buttons in the Toolbar can do for us.

		E	Edit	Selecting, move and manipulate objects in the monitor widow
		T	Text	Create and edit Text blocks
		R	Rotate	Rotate objects
		L	Lighting	View and edit scene lights
		S	Shape	Create vector based objects through Bezier drawing
		M	Rectangle	Click and Drag to create rectangular shapes on-screen
		O	Ellipse	Click and drag to create elliptical objects on-screen
		Z	Zoom	Change magnification in the Monitor window

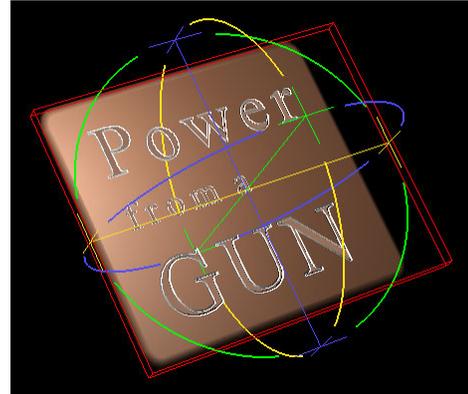
Rotate Button **R**



This tool is used to freely rotate an object in space. Don't confuse it with a similar tool in the Full Toolbar called the TUMBLE tool. The Tumble tool changes the local view only, it doesn't actually rotate any objects.

Objects can be rotated individually, or by selecting multiple objects or grouping them, may be rotated in groups.

Rotation may be added in two ways: use this ROTATE tool to manipulate the object in the Monitor Window, or use the Transform Palette to rotate (or reset rotation).



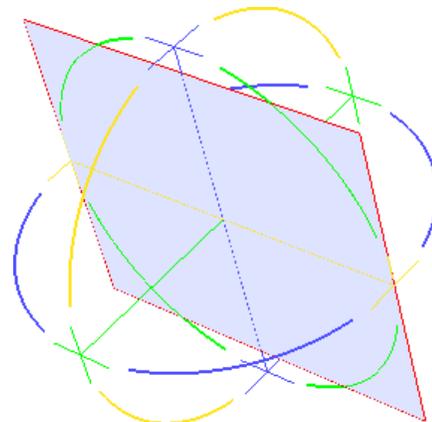
Select the objects and activate the Rotation tool:

- Select an object with the Edit tool and then choose the Rotate tool
- Choose the Rotate tool first and click on the object you wish to rotate

Multiple objects may be selected using the standard SHIFT and CONTROL click operations.

A RED bounding box outlines the object being rotated. Also, three axis lines appear which extend out from the object to join three circular rings which will be used to rotate around each axis. The overall impression is one of the object being contained inside a ball or sphere. The three straight lines emanating from the centre of the ball are:

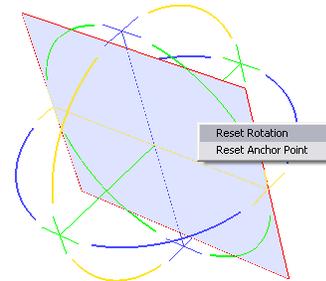
- A BLUE axis runs from top to bottom.
This is the Y axis
- A GREEN axis runs from front to back.
This is the Z axis
- A YELLOW axis runs from left to right.
This is the X axis.



There is also a circle in the color of each axis. By clicking and dragging on one of these circles, you can rotate the object in the appropriate axis. Hold SHIFT as you drag to snap in 15 degree increments.

The point where these three axis meet in the centre of the sphere is the point around which rotation occurs. This is the Anchor Point for the object, and it can be changed. At the end of each of these axis is a cross + . This marks the point of rotation for the individual axis. You can click on this mark and reposition it to reset the axis of rotation, and in so doing you are changing the Anchor Point for the object.

If you right click on an object selected for rotation, the context menu will allow you the option of resetting the rotation, or resetting the Anchor Point for the object.



When repositioning objects which have been rotated, these two keyboard shortcuts will be valuable:

- To reposition a rotated object within its local plane, along its own internal axis, hold CTRL + ALT and drag with the edit arrow. The object moves along its own X,Y and Z.
- To move the object along only one of these axis at a time, hold SHIFT + CTRL + ALT and drag in the direction of the axis to which you want the movement constrained.

Rectangle Tool **R**

A rectangle is another type of object you can create in your scene. As such, all the options we explored in Quick Titles can be applied to the shape. Also, all the Properties viewers we will be visiting shortly can also be used on Rectangles and Ovals. Sometimes, we may draw a rectangle or an oval and then edit its shape using the SHAPE tool to arrive at a more sophisticated object.

You may begin by setting the parameters for the object you are about to create. If you want the new object to look like one already on the screen, select that object with the EDIT tool (this will load its settings up in the various property viewers) before you choose the rectangle tool and draw an ellipse.

To draw a rectangle:

- Click and drag with this too to create a rectangle
- Hold SHIFT as you drag to constrain the shape to a square
- Hold CONTROL as you drag to draw a square from the centre

To round the corners of a rectangle, you must first select the rectangles. You may now:

- From the menu's at the top of the screen choose OBJECT > SET CORNER RADIUS and choose a corner radius
- If the Rectangle button is active, you may right click on the rectangle and choose Set Corner Radius from the context menu.

Ellipse Tool **O** 

You may begin by setting the parameters for the object you are about to create. If you want the new object to look like one already on the screen, select that object with the EDIT tool (this will load its settings up in the various property viewers) before you choose the Ellipse tool and draw an ellipse. To draw an ellipse:

- Click and drag with this too to create an oval
- Hold SHIFT as you drag to constrain the shape to a circle
- Hold CONTROL as you drag to draw an oval from the centre

Shape Tool **S** 

The shape tool is used to both draw and edit shapes. It is in many respects a basic Bezier drawing tool, and if you have used Bezier editing in any other program you will find Marquee quite similar.

The shape tool can edit circles and rectangles you drew using the other Shape drawing tools. The Marquee manual and Marquee Help file have lots of information and advice on how to use this tool. To get you started here some guidelines:

To draw a shape:

- Ensure no other shape is selected before you begin
- Click to create the starting point for your shape
- Click to create subsequent points along the shape
- To complete a closed shape, click on the initial (start) point
- To complete an opened shape (path), click ESCAPE / Select another tool / right click the mouse button.

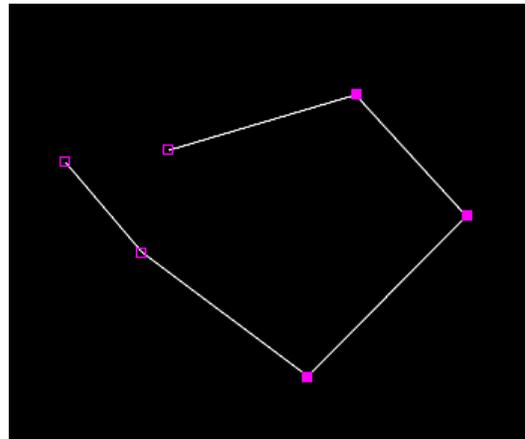
This shape will consist of segments (lines) joined by corner points only (sharp turns at each point). You can create curved (true Bezier) points by clicking and dragging as you add points to the shape.

Selecting Points on a Shape:

Editing a shape often begins with selecting one or more points on the shape itself. To do this, chose the Shape tool, then select points as follows:

- Click on an individual point
- Shift + Click on additional points to add them to the selection
- Control + Click on points to alternately add or remove them from the selection
- After choosing at least one point on a shape, drag to lasso other points on the shape
- To select all points on a shape, right click and choose Select All Points

This is an open shape made of line segments joined by corner points. The three points on the left are hollow, indicating they are not selected. The three points on the right are solid, indicating they are selected.



To add a Point:

- Alt + Click on the segment (line or edge) of a shape to add a point there
- Right click on a shape and choose Add Point from the context menu

To Delete a point:

- Select the control point and press the Delete key
- Right click on a point and chose Delete Point from the context menu

To move a point:

- Click and drag the point
- Hold SHIFT + CONTROL as you drag to constrain movement in the direction you first drag the point
- Hold SHIFT as you drag if the object has been rotated and you want to drag the point along its local axis

To change the type of a curve:

- To make a corner point, right click on a point and choose Make Cusp
- To make a smooth Bezier corner, right click on a point and choose Make Smooth

To Open up a shape:

- Right click on a point and choose Split Point. This point will now be split into two separate, overlapped points. Drag one out of the way to see both points.

To close an open shape:

- Drag one point on top of the point you wish to join it on to.

To delete a segment (line) from a shape:

- Right click on a segment and choose Delete Segment

Zoom Tool **Z** 

- To zoom IN Click on title to zoom in at that spot
- To Zoom In use the keyboard shortcut Control + =
- To Zoom Out hold Shift or Control as you click
- To Zoom Out use the keyboard shortcut Control + -

While not using the Zoom tool, these are some other methods to change the magnification of the display:

- To see the entire title choose View > Zoom to Fit
- To see the entire title use the keyboard shortcut Control + 0
- To see the title at 100% size on your screen choose View > Actual size
- Click RESET in the Monitor Window

Zoom Shortcuts

There are two shortcuts you will want to learn to use when you are zoomed in on your monitor window:

- PAN: Allows you to scroll around the monitor window when you are zoomed in enough that the entire scene is not totally visible. Hold the RIGHT mouse button, hold CTRL and drag in the monitor window.
- ZOOM: Another method of zooming is to interactively zoom. Hold the RIGHT mouse button with SHIFT and CONTROL and drag up or down to zoom in and out

The Full Toolbox

When you start Marquee with the basic Toolset, you receive the basic toolbar. This toolbar is simple, but missing 4 buttons which are available in the Full toolbox. Activate the full toolbox as follows:

- To access the Full Toolbox, chose View > Toolbox > Full

The Simple toolbox (left) has fewer buttons than the Full Toolbox (right). The four new buttons are:

A  Animation

Activates Animation mode, which we will discuss in a future module.

Y  Page

Used to create new 'Decks', which is a collection or sequence of pages, all within the same 'title'.

V  Tumble

Allows you to reposition or 'tumble' the scene to various angles so you can observe the position and relationship between objects in your scene. This tool does not affect the final output the audience sees- it is a working view only.

H  Pan

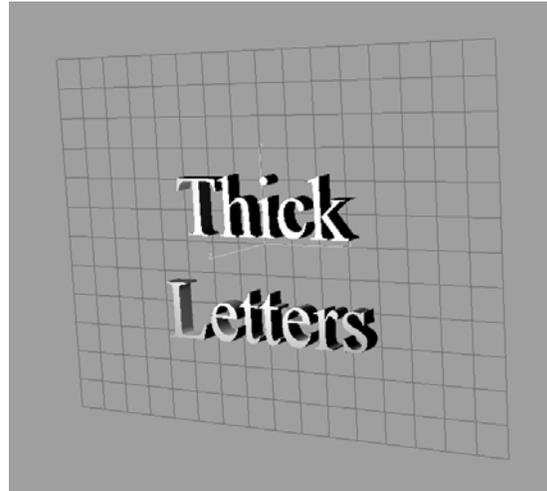
When you are zoomed in and only seeing a part of your title, click and drag on the screen with this tool to pan left/right or Up/down within the monitor window.



Tumble Tool

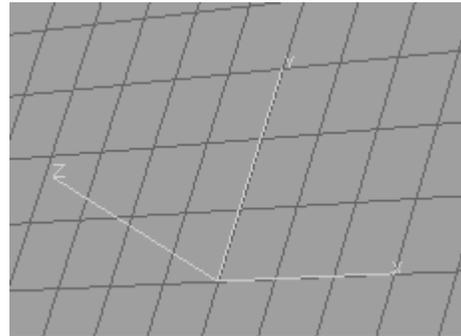


Before tumbling, these letters are seen straight on and it may be difficult to know that they are, indeed, letters with depth.



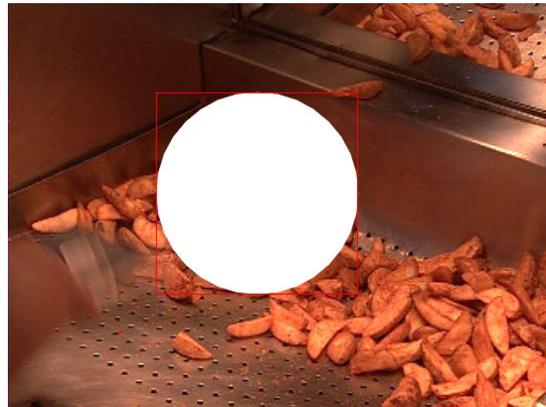
After tumbling, we can see the letters from a sideways view and the letters depth becomes obvious.

When you use the tumble tool, or indeed any view that is not the default view, you will see the gray grid superimposed on your image. This simply indicates you are not looking at the standard view, and the grid itself offers a reference for your viewing. Also attached to this grid are three axis indicators showing the position of the global X, Y and Z axis from your current view position.

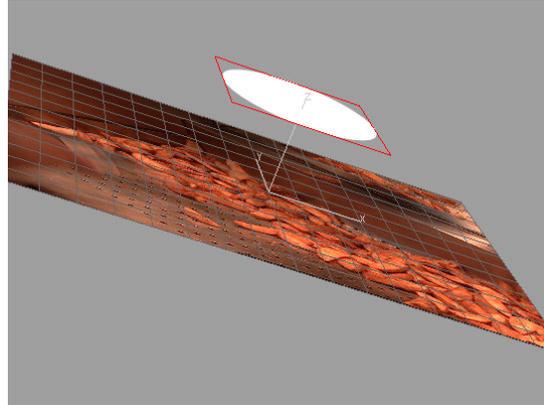


The TUMBLE tool  allows flexible Viewing in 3D. At first glance, it looks like the rotation tool, but notice it is grouped with the other tools used to navigate around the Monitor Window. To use it, activate the button and then simply click on the Monitor Window and drag to view your scene from almost any orientation.

Remember you can select other views as shown previously, or return to Scene View (what the audience will see, a view from the 'front') by pressing the Reset  button in



the lower right corner of the Monitor Window.



Tumble Tool shortcut

You will use the tumble tool so often you might like to learn its shortcut. While holding down the RIGHT mouse button, hold CONTROL and ALT down and drag in the monitor window with your mouse to tumble on command!

Exercise 3

Students will create a simple text graphic and then:

- Rotate the text slightly
- Draw a circular or rectangular shape beside the text
- Edit this shape using the pen tool
- Zoom in and out on their graphic to explore it better
- ‘Tumble’ the scene to see the shapes relative positions better

Module 4: Toolbars

Objectives:

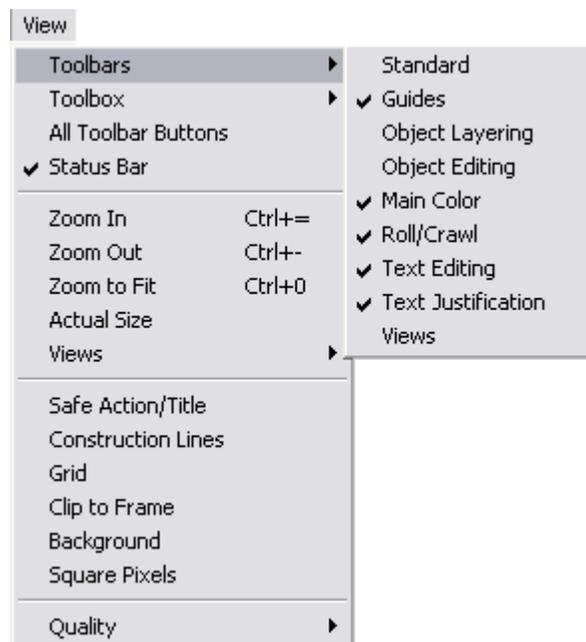
In this module we will learn:

- How to customize the Toolbars
- How to use the toolbars for alignment, grouping, layering, locking and selecting views

Customizing the Toolbars

After creating our basic type, we might begin looking for more sophisticated tools for layering, grouping, locking, aligning, and distributing our text. The controls to do this are available in Marquee, and by default they are not visible. To perform these functions, we begin by making these extra buttons visible on our screen.

From the VIEW menu, begin by activating (placing a check mark beside) all the selections in the TOOLBARS menu. This will make all the Marquee buttons visible.

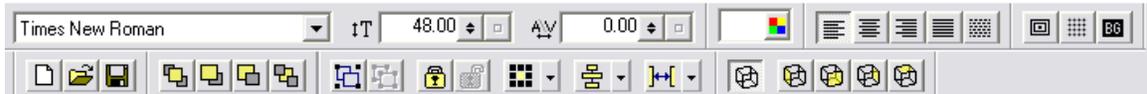


A toolbar will initially appear as a floating window. If you want to dock it with the other toolbars, drag it into position in the Toolbar area and drop it. Toolbars within this area may also be dragged to new positions within the toolbar.

TO MAKE THESE CHOICES PERSIST, save them in a toolset, otherwise the next time you open Marquee they will be gone again.



Default button bar



Full Button Bar with all Toolbars displayed

The new toolbars which will appear are:

	Standard	New title, Open Title, Save Title
	Object Layering	Front, forward, backward, back
	Object Editing	Group, Ungroup Lock, Unlock Object Position Object Alignment Object Distribution
	Views	Scene, Left, Front, Right, Top

STANDARD TOOLBAR

	New Title	CONTROL + N	Make a new title
	Open Title	CONTROL + O	Open an existing title
	Save Title	CONTROL + S	Save current title



OBJECT LAYERING



Bring to Front CONTROL + SHIFT +] Bring selected object to front



Bring Forward CONTROL +] Bring selected object forward 1 level

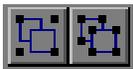


Send Backward CONTROL + [Send selected object back 1 level



Send to Back CONTROL + SHIFT + [Send selected object to back

It is important to realize these layering controls work within a single layer. If there are other layers present in your title, bring to front will indeed bring the object to the front of the objects on that layer, but it may still be covered by objects on a higher layer. Changing layer order may also be required to achieve your desired result.



GROUPING



Group Objects CONTROL + G Group selected objects



Ungroup Objects CONTROL + SHIFT + G Ungroup selected objects

When several objects are grouped you can apply transforms and other changes to multiple objects at once. It is possible to still select a single object in a group:

- ▶ ALT + CLICK on an object in a group with the edit tool to select this single object only.



LOCK



Lock Objects

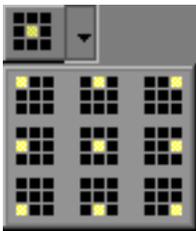
Lock selected objects



Unlcook
Objects

Unlock Selected objects

A locked object cannot be moved or rotated, but other attributes may be changed.



FRAME POSITION

Position bounding box of selected item to specific position in frame. Note this is NOT the same as justifying multiple lines of text – if multiple items are selected they will be moved to the same position on the screen, overlapping.

Position
Objects

NUMERIC
Keypad:

7 8 9
4 5 6
1 2 3

These buttons are usually used in the FRONT view, as discussed later. When used in other views (Top for example) they take this view into account and adjust the Z position (position in 3D space) of the object.

If Safe Title is ON, alignment is relative to safe title. If Safe Title is OFF, alignment is relative to the frame edges.

Rotated and Extruded objects use the front face as the reference for positioning.



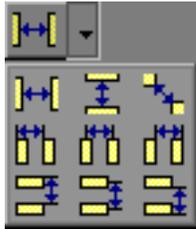
ALIGNMENT

This tool aligns multiple selected objects relative to each other.

-  Align TOP
-  Align MIDDLE
-  Align BOTTOM
-  Align LEFT
-  Align MIDDLE
-  Align RIGHT

The Reference Object

Select all the objects to be aligned. One of these objects needs to act as a reference object – for example if you are left justifying objects, which object do you want all the others to adjust to? Shift + Click on the object to act as the reference. The reference object can be identified by the solid red bounding box handles around it. All other objects had hollow red handles.



DISTRIBUTION

Select multiple objects and press appropriate button. Objects will be evenly distributed as indicated by button icon.



Distribute HORIZ
with even gaps



Distribute VERT
with even gaps



Distribute DIAG
with even gaps

For diagonal distribution, select objects in order, first to last



Distribute HORIZ
by left edge



Distribute HORIZ
by midpoint



Distribute HORIZ
by right edge



Distribute VERT
by top edge



Distribute VERT
by middle



Distribute VERT
by right edge

Selecting the Reference for Alignment

Normally, objects are distributed relative to each other. The two objects at the outside edges are the reference objects, and the objects in the middle are moved as appropriate.

To distribute objects relative to the container itself – such as the frame - hold **CONTROL** as you click on one of these buttons. The free space will be evenly distributed between the objects, and also between the edges of the container itself.

Views matter

These keys work differently depending on which view you have selected when you use them. Alignments are made along the following axis in the indicated view:

Front View: X and Y
Side View: Y and Z
Top View X and Z



LAYER VIEW

Shows desired view **of currently selected layer**. Objects on other layers are hidden. Notice shortcut keys on numeric keypad logically ‘match’ the view they select.



SCENE

CONTROL + NumPad 5

Shows all objects in the scene, on all layers, as they will be rendered in the final output.



LEFT

CONTROL + NumPad 4



FRONT

CONTROL + NumPad 2

This front view displays a **GRID** so you don’t confuse it with the **SCENE** view. The grid indicates you are only seeing a single layer.



RIGHT

CONTROL + NumPad 6



TOP

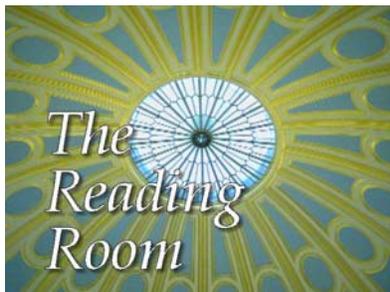
CONTROL + NumPad 8



Reset Scene

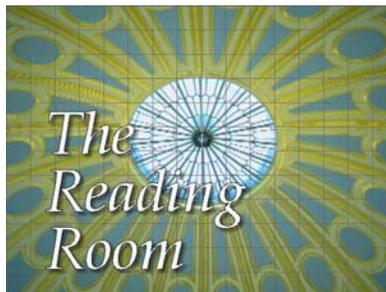
This button is located at the very bottom right of the Monitor Window. Clicking on it also shows the entire scene from the front, but in addition it also executes a **Zoom To Fit** so you always see the entire title filling the available window space.

Here are some examples of **VIEWS** accessible with these buttons:



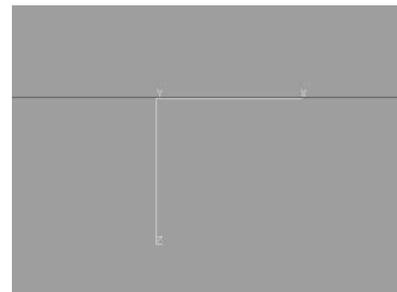
Scene View

Shows the scene as it will appear in the Media Composer for the audience to see.



Front View

Notice the grid which indicates this is **FRONT** and not **SCENE** view.



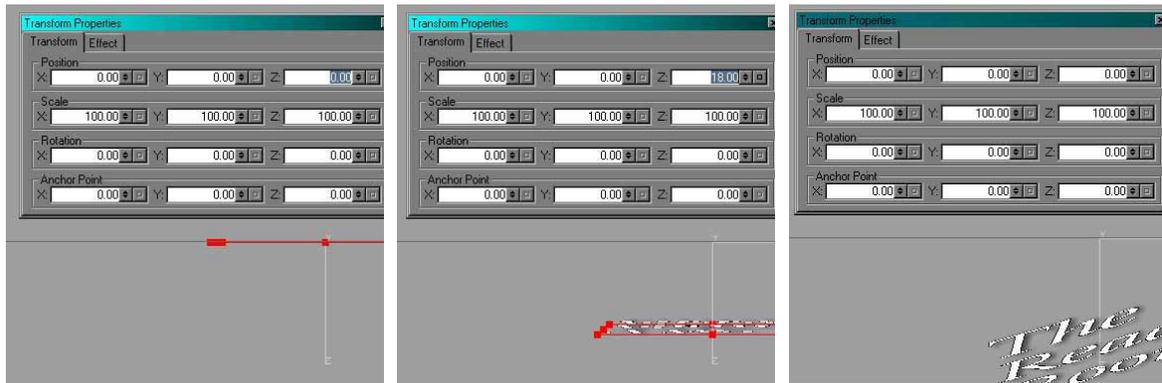
Top View

This shows the current title from the top of the stage. Light gray lines indicate **X, Y and Z** co-ordinates for reference during 3D orientation.

Views and Tumble vs Rotate

The ROTATE tool actually changes the orientation of an object in 3D space, changing the way it looks for the audience. By comparison, the various VIEWS and TUMBLE do not change what the audience will see, they only change what the editor sees so we may explore and analyze the relationship between objects in our scene.

The preset TOP view and other side views are excellent for getting your bearings when you are working in a 3D world. For example, here is what a title looks like from the top when we begin to change its position and rotation:



Top view with title in default position

Top view, title moved forward on Z Axis (closer to camera)

Top View, title now tumbled in X and Y as well

Exercise 4

- Students will create a graphic which is a list of names. This list will be left justified, and equally spaced on the screen.
- Draw a rectangular shape, and place it behind the text
- Edit this shape to create a less obvious rectangle
- Adjust the opacity of the shape to make it transparent
- Use the Transform Palette to 'scrub' the lettering forward in Z, closer to the 'camera'
- Tumble your scene to see the relationship of the objects
- Use the VIEW buttons to view your scene from several pre-set positions in space

Module 5: Property Viewers

Objectives:

In this module we will:

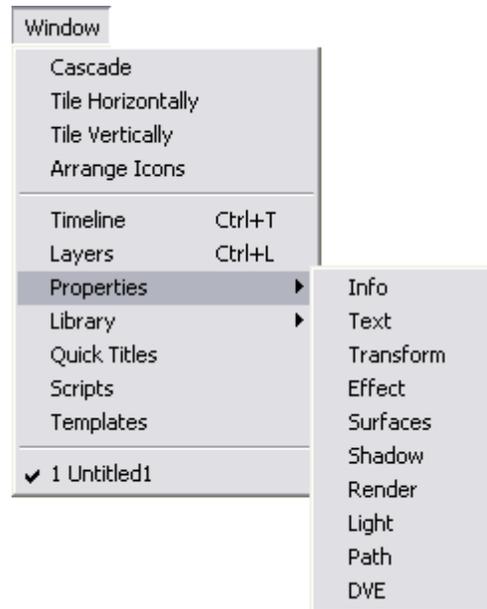
- Learn what a property viewer is
- See how to manage property viewers
- Learn how to use the Transform, Info and Text property viewers
- Explore how to work with layers, including using the Layers property viewer

Managing Property Viewers

What is a Property Viewer?

Property viewers are extra windows you can open to access more controls for various parameters. For example, while you can create a shadow with Quick Titles, it does not allow access to all the Shadow options. For this, you need to use the Shadow Property viewer. Similarly, there are property viewers for:

- Info
- Text
- Transform
- Effect
- Surfaces
- Shadow
- Render
- Light
- Path
- DVE



Opening a Property Viewer

We are going to look at some of these viewers here. As shown above, they can be opened from the **WINDOW > PROPERTIES** menu item. Another way is to simply right click on almost any of the other tabs already visible in Marquee to see a list of all the property viewers, and chose the one you want from here. The added benefit is that this new viewer opens as a tab in the viewer you used to access it.

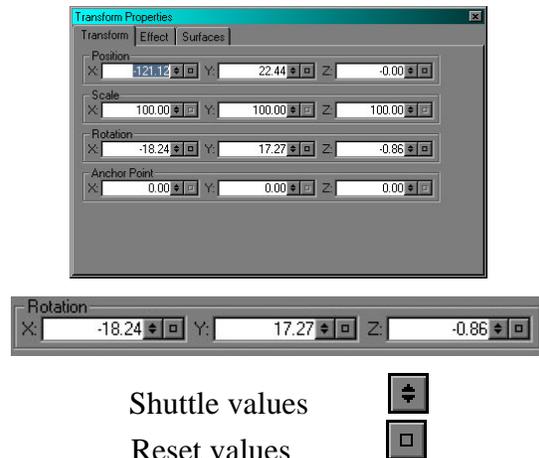
Closing a Property Viewer

If a property viewer is visible as a stand alone palette (no other tabs nested within it) simply click the close box on the property viewer. If the property viewer shares a window with other palettes which you don't necessarily want to close, you may close one of a group of property viewers by right clicking on the tab. This will call up the list of Property viewers mentioned above, but at the bottom of this list is the option to *close* the currently selected tab.

The Transform Property Viewer

This is one of the most valuable property viewers. For a selected object it operates as a status viewer- we can look here to read the values of the current position, scale, rotation and Anchor Point.

We can also change these properties for one – or multiple selected objects. Changes may be entered by typing a new value in the appropriate number field or by dragging on the spinners beside each number. Also, we may reset any value to its default by clicking on the reset square beside each value.



Position

This of course indicates the location of an object within the marquee stage. The origin is at the screen centre, location 0:0. The other corners of the frame have numbers which depend on the aspect ratio of the frame itself – the upper left corner of course has a different ‘location’ in a 4:3 frame than in a 16:9 frame. For NTSC, the screen position values in pixels are:

UL – 364.5, 243	TOP Mid 0, 243	UR 364.5, 243
ML -364.5, 0		MR 364.5, 0
LL – 364.5, -243	Bottom Mid 0, -243	LR 364.5, -243

Changing frame size

Marquee remembers screen positions as proportions of screen height. If you change a frame from a SD frame to an HD frame nothing distorts. The objects are scaled up to fill the larger frame, and retain their relative positions within this larger frame, with the extra wide screen space appearing as empty space off either end of the frame.

Change frame aspect ratio

If you change the aspect ratio of the frame from 4:3 to 16:9 nothing becomes distorted in Marquee- the objects retain their proportionate spacing in the frame. In this case the objects fill the centre of the 16:9 frame and the extra space appears as wings on either side of the title frame.

The Anchor Point

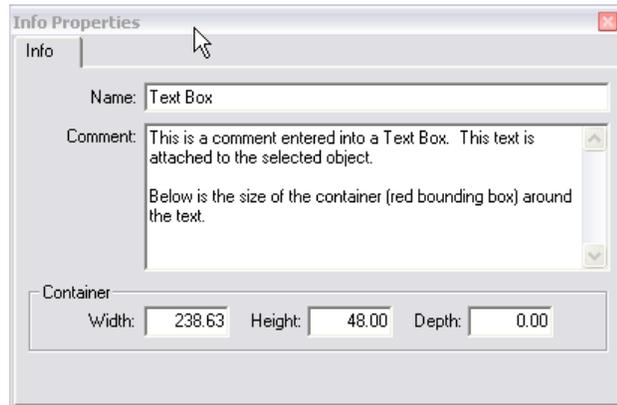
We saw how to change the Anchor Point with the rotation tool, and we see it can also be changed (and reset) here in the Transform property viewer. But what is the anchor point?

It is the ‘centre’ of the object, or more accurately the origin around which transforms occur. For example, scaling and rotation use the anchor point as the reference for their operations.

To swing a title as if it were hinged like a door, we would move the Anchor point outside the text and perform a Y rotation. To scale a font from a particular letter we would place the anchor point on that letter before we scale. Note that changing font size does not use the Anchor point as a reference, but scaling (or rotating) the text container does.

Info Property Viewer

If you look at the Transform Property viewer above, you see a lot of controls but not one for controlling the dimensions of the selected object. For some objects, the Info property viewer has those controls. The numbers at the bottom of this property viewer adjust the size of the selected container. They are not used to set sizes of objects, but set the size of the bounding boxes that contain other objects. This includes the bounding boxes of Groups and Text Boxes.

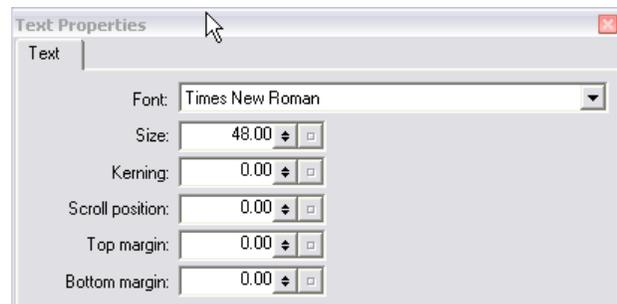


Also notice the NAME and COMMENT fields. Objects can be named, and these names are visible in the Layers viewer. Also, comments can be attached to each object if desired. These could be instructions or design specifications.

The Text Property Viewer

This viewer contains settings already seen on the Toolbars- Font, Size and Kerning. We also have three new controls here.

Scroll Position is used with Rolls and Crawls to set the position of the roll or crawl.



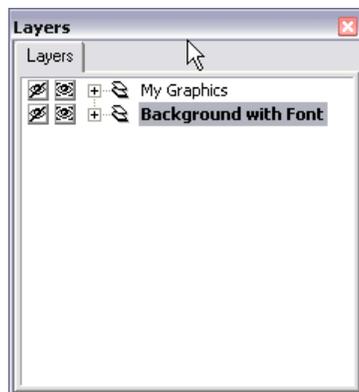
Top Margin adjusts the position of text up or down within the text box. It can be used to raise and lower text, much as baseline shift might be used in many other products.

Bottom Margin is for rolling text only. It acts as a crop on the text starting at the bottom of the text box. You would use it to chose the position on screen you wish the scroll to begin at if you don't want the text to roll on from totally off screen. This setting has not effect on static text or crawling text.

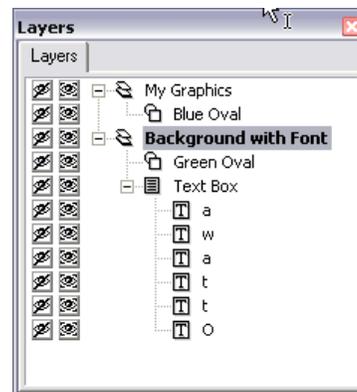
The Layers Property Viewer

We already know the objects you create are placed one on top of the other, and that there is a stacking order we can change with the toolbar. The Layers Property Viewer is a step beyond that. An object may have a stacking order within its own layer, and each layer has a stacking order within the title.

One or more objects can be created in a layer so related objects are easier to manage. For example, you might build a complex object on its own layer so you can change its order on screen more easily than having to select and move its individual parts within a single layer.



Layers Palette with two renamed layers visible



The layers expanded so details about their contents is visible

Selecting a Layer

- Click in the Monitor window on any object already on that layer
- Click on the Layers name in the Layer Property Viewer

The selected layer is the layer in which new objects you create will be placed.

Selecting an Object

Even if you can't see an object because it is off screen, covered by another object or has its opacity at 0, you can still select it for modification here in the layers palette. Click on an object in the Layers property viewer to select it. Shift + click to select a range of objects, or Control + click to select (or deselect) individual objects.

Layer Buttons

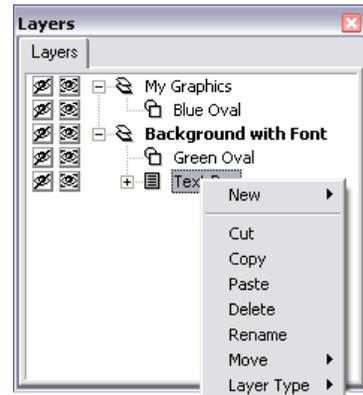
When working with layers, there are two buttons which may help you find your way:

-  Show or Hide this layer or item.
-  Solo this layer or item. This is useful for finding things which may be hidden as it hides everything else!

The Layer Context Menu

Right clicking on an object in the layers property viewer will access a context menu with all the usual suspects: cut, copy, paste, delete, rename and move, which chooses object stacking order within the layer.

Layer type allows you to choose 2D or 3D layer behavior.



Create New Layers

To create a new layer, right click in the layers property viewer. One of the options is "New", and from there you may choose a new 2D or a new 3D layer to be added to your document.

2D and 3D layers

A 2D layer ignores 3D behavior. Layers do not intersect and when attempting to create 3D, the 2D layer behaves rather badly. This is the default layer type. If you want 3D interaction a 2D layer is a bad thing, and a common error. On the other hand, 2D layers behave in a more predictable manner and render more quickly. If you don't need 3D behavior, you should leave your layers as 2D layers. This might be the case in a complex graphic full of 3D objects in which you wish to include some text which should be immune from 3D interaction – such as a logo or a bug.

Navigating layers

Once the layers property viewer is active a layer has been chosen (highlighted) you can use your arrow keys to navigate the layers.

- The UP and DOWN arrows move between layers.
- The LEFT and RIGHT arrows open and close branches of the layers palette

Move Objects Between Layers

In the layers property viewer, you can select an object within one layer and drag it to another layer.

Renaming your layer

We saw earlier you can right click on a layer to rename it. You may also click once on a layer to select it. Pause. Then click a second time to activate the Layer Name so you can retype a new layer name.

Changing the order of Layers

Click on a layer, or its contents, and drag it to a new position in the layers palette. You may use the multiple select capabilities of your OS to select multiple objects (Shift click and Control click). Objects on a top layer cover over objects on a lower layer.

Exercise 5

- Create a graphic with the text on one layer, and a background (drawn) object on a separate later.
- Use the Transform property viewer to ‘scrub’ the positions of these objects in 3D space
- Use the Layers palette to select the first letter only of your tesx, and make this letter larger than the rest
- Create a second graphic object of a different color, on the same layer as the original graphic object
- Rotate these graphic objects so they (should) intersect
- Make the layer these graphic objects are on a 3D layer, so they *do* intersect as you expect

Module 6: Shadows

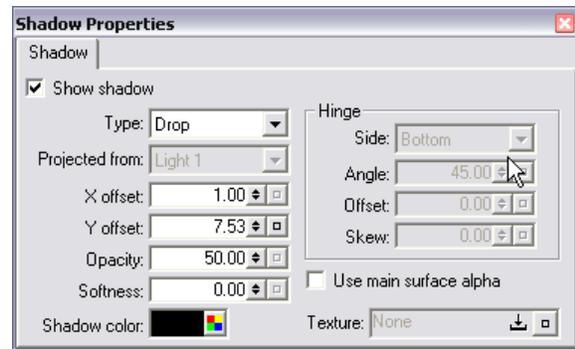
Shadows are the secret of realism. Shadows create depth and the impression of a 3D environment on the 2D TV screen.

Objectives

At the end of this lesson you will be able to:

- Define the shadow types supported by Marquee
- Create and manipulate shadows of each type

We learned how to create a basic drop shadow using the Quick Titles window. Shadows are much more capable than that may have indicated. We use the Shadows Property Viewer to create and manipulate shadows with much more control.



The Shadow Types

Shadows come in three flavors and can be adjusted using the Shadow Property Window. To begin, we need to know what the three types of shadow are.

DROP

shadow

Shadow falls behind the object on the shadow plane. The shadow is not affected by lights in the scene



LOCAL

shadow

Shadow falls on shadow plane, and is hinged to the edge of each element in the original object, ie each letter.



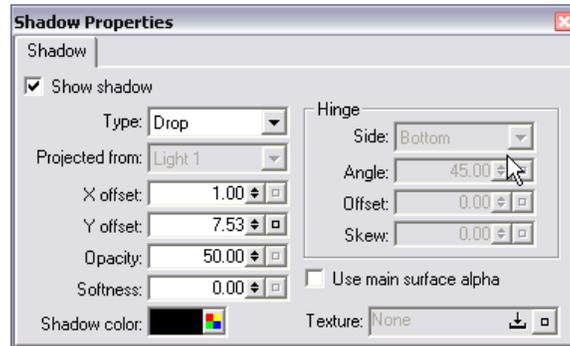
PROJECTED

shadow

Shadow is cast from *one* of the light sources in the scene, and will change as the light moves. To choose which light, open the Shadow Property box and choose a light from the “Projected From” popup.



Shadow Property Viewer settings



- SHADOW TYPE – Drop, Local or Projected, as described previously
- PROJECTED FROM - Only works with Projected, selects light that casts the shadow
- X OFFSET and Y OFFSET –Only works with Drop shadows, sets shadow position behind object
- OPACITY – Transparency of shadow
- SOFTNESS – Softness of shadow edge
- SHADOW COLOR – Color of Shadow
- HINGE SIDE – Where shadow is attached to object- back, left, right, top, bottom. Not relevant for Drop Shadow.
- HINGE ANGLE – Angle at which shadow is projected onto the plane behind the letter. Not relevant for Drop Shadow.
- HINGE OFFSET – Raises shadow position up and down. Not relevant for Drop Shadow.
- HINGE SKEW – For Local shadows only, tilts shadow left and right.
- USE MAIN SURFACE ALPHA- makes the shadow take on the shape of the alpha channel of an imported image, if it has one, rather than casting a shadow from the full rectangle (container) of the image.
- TEXTURE: You can assign a texture to use as a shadow projection, instead of black. We will look at how to assign textures later. To see the texture, change your shadow color to WHITE. Any other shadow color will tint the texture, and indeed black will hide the texture entirely.

Exercise 5

- Create a white background object so you can see your shadows clearly
- Create and manipulate the three shadow types described here (drop, projected and local)

Module 7: Lighting

Lights are an extremely powerful feature in Marquee. They exist in a full 3D environment in the sense that objects and lights may be positioned and animated in X, Y and Z.

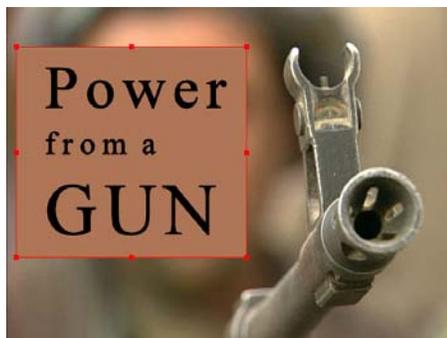
They really do create the effect of a light shining on an object in space. You can use a single light to add depth and shading, or create a full ‘scene’ with multiple lights distributed in 3D space around your objects.



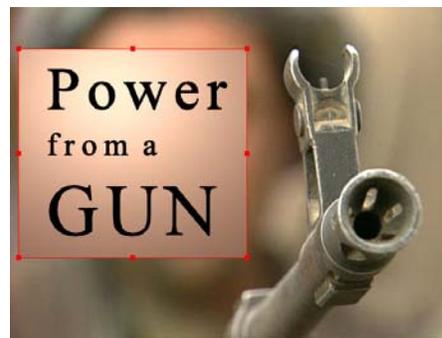
Lights are positioned in space, and as expected lights closer to an object make brighter reflections than lights further away. As well, if you rotate an object the lights will make the closer part of the object brighter than the further part.

Lighting must be used to see proper extrusions and edges. This may be as simple an act as checking the ‘Enable Lighting’ check box in the Quick Titles window, or can be as complex as creating and choreographing multiple lights within the Marquee environment.

Many of the buttons we looked at earlier for centering and alignment also work with lights. To Marquee, lights are just another object!



No Light



Single, default light turned ON

Objectives

At the end of this module you will be able to:

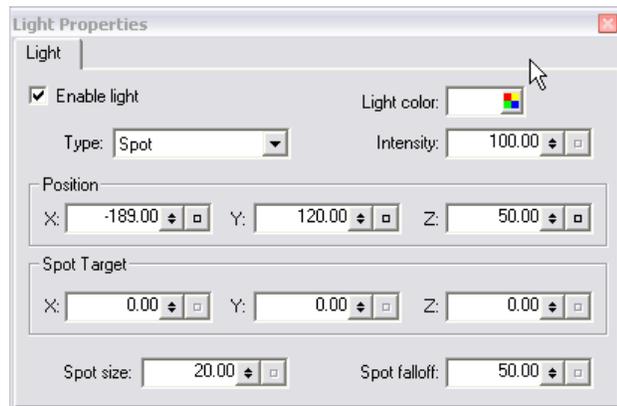
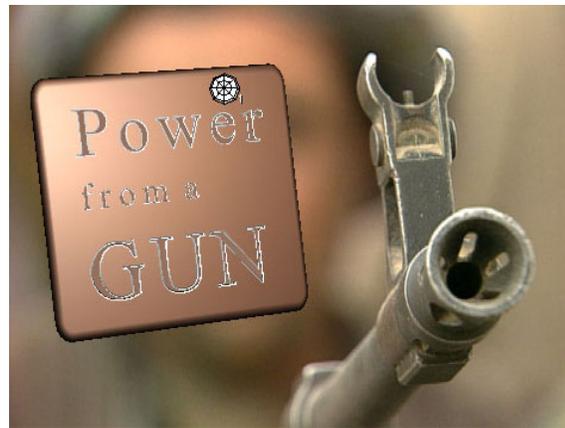
- Active (enable) lights, create and delete lights
- Describe, select and manipulate lights from the three light types in the Light Property Viewer
- Describe the main mistakes made with lights

Enabling Lighting

Lighting effects can be added to the main surface and / or to the edge. The simplest method is to activate the appropriate check box in the Quick Titles window. If you are going deeper in surface creation, you will be using the Surface Properties palette where you may also enable or disable lighting.

By default, when you enable lighting you will have a single white light in the left side of your environment (of type Local, see next section). You will see the effects of the light, but not the light itself.

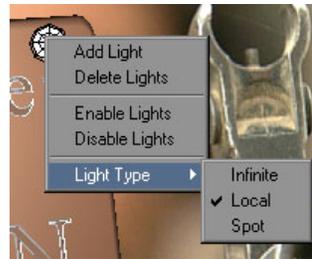
To see your lights and be able to manipulate them, select the Lighting button . You might also like to open the Light Properties viewer for access to further adjustments (Window > Property > Lights).



Lights may be positioned in the monitor window by dragging them around with the Edit tool. Lights have movement in 3 dimensions. To access all of these you may need to use 3d views and the Transform palette for accurate visualization and positioning



Lights may be enabled, disabled, created and deleted by right clicking on any light or location in the scene and making the appropriate selection from the pop-up menu. You may also use the following shortcuts with the Light tool:



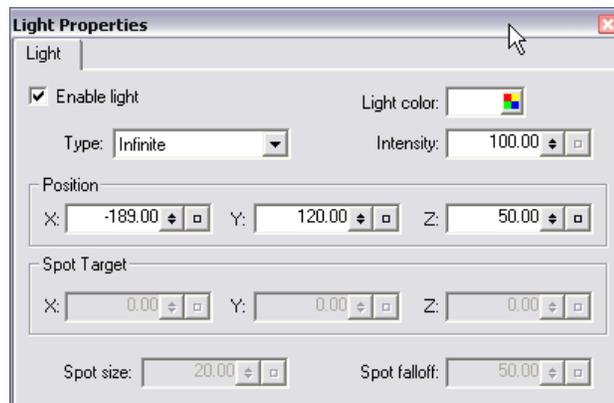
- *New Light*: ALT + CLICK in Monitor Window at desired location
- *Delete Light*: Select one or more lights and press DELETE key on your keyboard

Light Types

INFINITE

A light like the sun – it casts light that comes from far away which is directional, and the light rays are parallel. Also called a directional light.

Note that for this light only, increasing the distance does not affect brightness unless the light is VERY close to the text object.



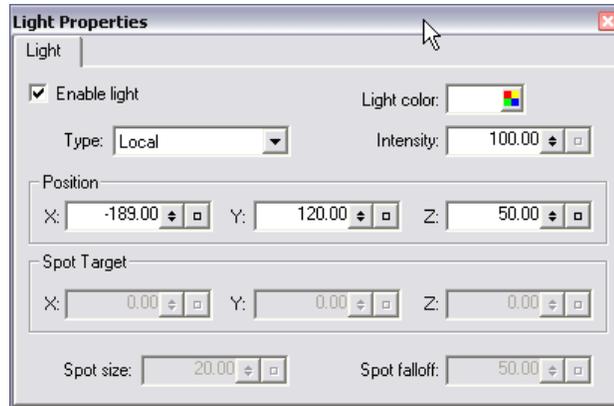
This light casts hard edge shadows which, because the light source is far away, do not enlarge behind the object, but generally retain the objects initial dimensions.



LOCAL

A light like a bare bulb or a candle. Light is emitted in all directions equally. Also called a point or omni directional light.

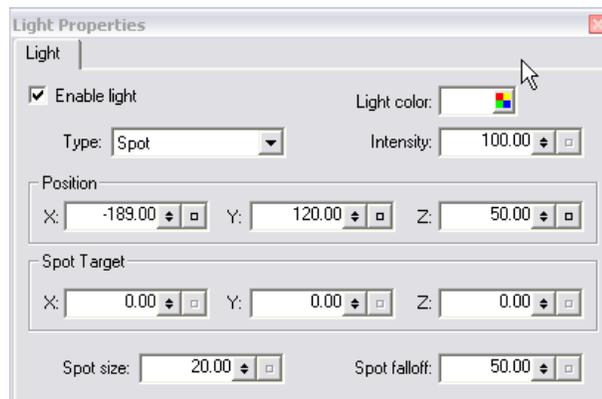
The shadows can expand (if the light is close enough) to become larger than the object itself.



SPOT

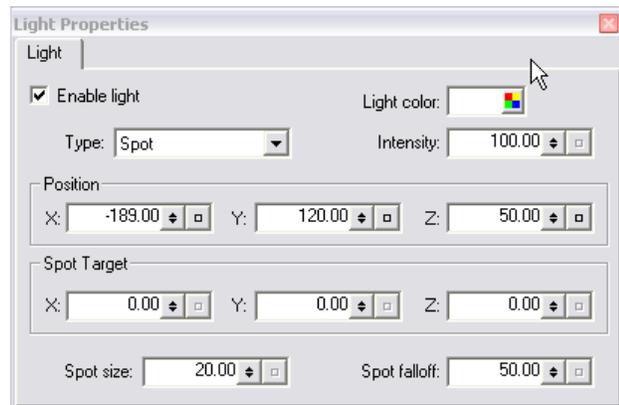
A light like a true spot light. Light is focused in one area and you may adjust:

- Spot Target – where the light is pointing
- Size – how focused the light beam is
- Falloff – softness at the edge of the shadow



Each light may be adjusted using the Light Properties Viewer accessed through the menu WINDOWS > PROPERTIES > LIGHT. Click on a light with the Light tool to see the attributes for that light. Many aspects of each light may be manipulated:

- ENABLE or DISABLE
- TYPE – Local, Spot or Infinite
- COLOR
- INTENSITY
- POSITION
- SPOT TARGET – Where the light is pointing
- SPOT SIZE
- SPOT FALLOFF



Lights are objects in your scene which may also be manipulated and monitored using the Transform Property Window.

All aspects of each light may be animated by manipulating their Property Curves in the Timeline Window, covered later. *You must select LIGHTS from the VIEW menu in the timeline to see the attributes for the lights in your scene.*

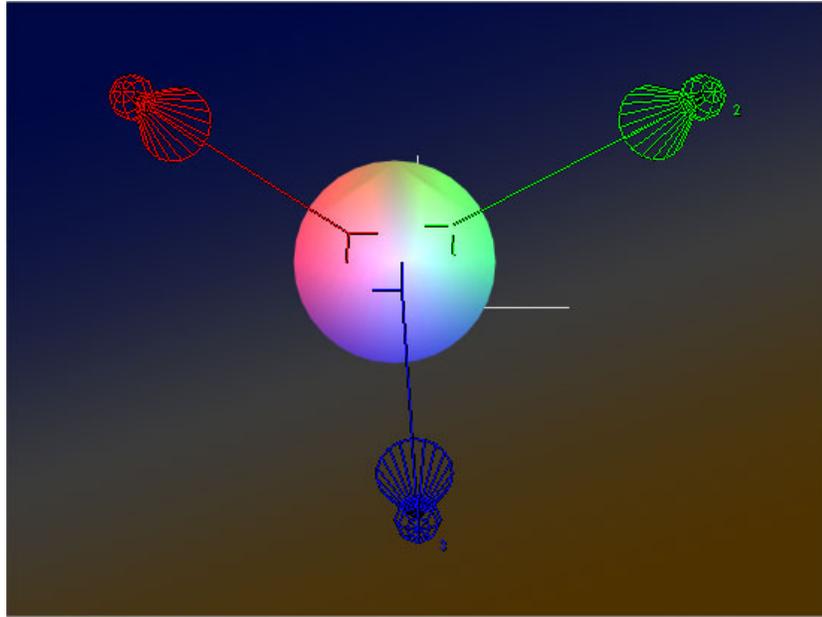
Common Mistakes with Lighting

Lighting must be turned on for each object in the scene by choosing enable lighting for the main surface (fill) or the border (edge).

- ▶ Remember to turn lighting on for all edges or the edge effects will not be visible
- ▶ Remember in most cases to turn the lighting on for the fill as well as the edges for a uniform look

EXERCISE 7

Create a circle using the drawing tools. Add three lights to the scene. Adjust each to be one of the primary colors- Red, Green or Blue. Position and point the lights at the white circle as shown here, to create the effect of a color wheel.



Module 8: Surfaces

Introduction

Marquee allows the use of graphic images in several contexts. You can use a graphic as a texture, for example to fill letters. You can also use a graphic as a background (which will always fill the frame) or as a standard object within your title which you can resize, reposition and otherwise treat as any other object in your title.

Marquee has a special property viewer – the surfaces property viewer – to allow you a lot of control over the ‘surfaces’ of the objects you create. Each object you create has several surfaces which can each be treated separately. For example, each surface can be filled with a color, a texture, a gradient or even a combination of all three. Also, each of these surfaces can be fine tuned from the Surfaces property viewer much more than the Quick Titles allowed.

Once you have fine tuned your surface, you may want to save that ‘look’, or some part of it, for re-use. We will look at how to save and recover different properties in the Marquee Libraries

Objectives:

In this module we will:

- Learn how to use the Surfaces Property viewer to apply materials to our objects
- Learn how to work with Solid Colors, Textures and Gradients
- Learn how to save and apply various combinations of surface properties in our Libraries
- Learn how to incorporate images into Marquee as Backgrounds and imported image objects

An object has surfaces

A surface is an area of an object. If you draw a shape, or type a letter, the obvious surface is the front of the letter or the shape. This is the Main surface, but there are several others associated with every object you create.

- MAIN SURFACE: The front of the objects
- The EDGE: The surface created by the edge effect on the object
- The EXTRUSION: Surface created by the extruded sides of the object
- The BACKGROUND: The area behind the text, which in the case of font is sized by the text container



Each of these surfaces can be customized with one or more of these:

- Solid Color
- Gradient
- Texture

When a surface is customized with some combination of these, we call the result a *material*. Materials, as we shall see, can be saved in the Materials library and applied to other objects. We use the Surfaces Property viewer to create and modify all our surfaces. The Surfaces Property Viewer allows us to customize the surface of the selected object(s), or if no object is selected, we can customize the surface of the next object we create.

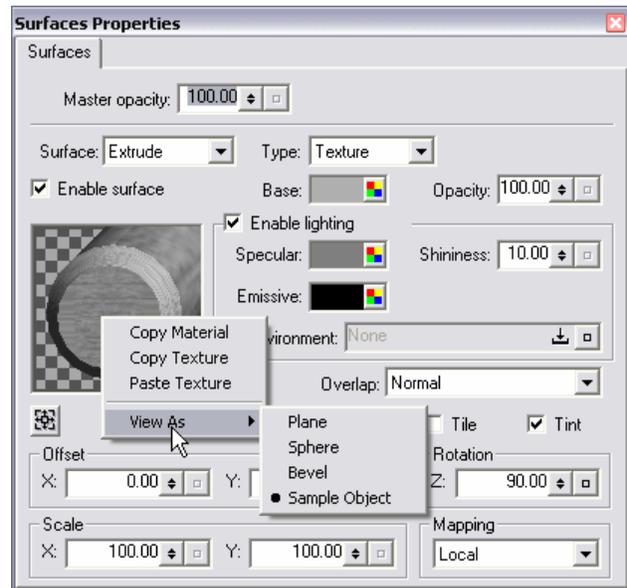
Using the Surfaces Property Viewer

Earlier in this course we looked at the how to open and manage property viewers. The Surfaces Property viewer is used to adjust the surfaces of an object – its main surface, extruded sides, the edge between the two and the background behind the container.

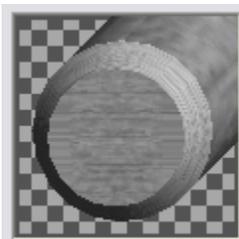
The Surfaces property viewer is dominated by the Material Swatch graphic. This graphic shows how your surface settings will look on different objects. If you right click on the Material swatch, you will be able to choose four types of swatch:

- Plane
- Sphere
- Bevel
- Sample Object

The selected swatch will be displayed with the currently selected Surface properties, except the Sample Object which shows the three surfaces on its shape accurately.

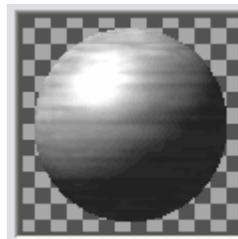


Material Swatch Choices



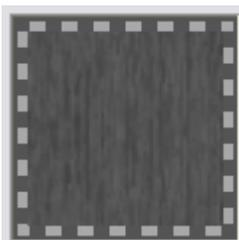
Sample Object

Shows all surfaces at once, applied to a 3d shape



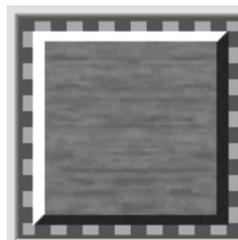
Sphere

Surface applied to a sphere, most useful when setting lights as you can see highlights



Plane

Shows material mapped onto a flat surface.



Bevel

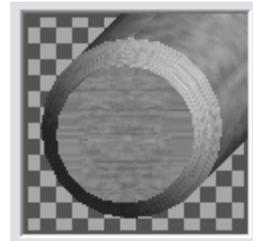
Best to see material applied to surface with an edge

- If Lighting is not enabled on a surface, both Sphere and Bevel appear as flat objects.

Selecting surfaces of you shape

We know that a shape can have up to four separate surface treatments. MAIN, EDGE, EXTRUDE and BACKGROUND. Each of these surfaces has identical controls, as we will see in a moment. We switch between the surfaces we want to change in a number of ways:

- Use the Surfaces list box in the Surfaces property viewer
- Click on the Material Swatch of the Sample Object (shown at right). The Sample Object has four segments representing each of the objects surfaces A circular front for the MAIN surface, a beveled edge for the EDGE, a cylinder for the EXTRUSION and a background for the BACKGROUND. Click on the desired surface to select its settings.

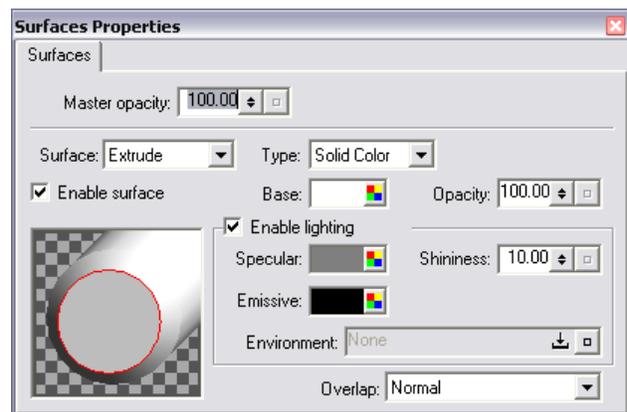


It is also worth noting that you can drag and drop textures and materials from the library onto any one of the surfaces of the Sample Object swatch. You can also right click on a surface of the Sample Object to choose Copy Texture, Copy Material and Paste.

SOLID COLOR type Surfaces

Select Solid Color as the type of surface. This is the default if you have not selected any surface yet.

Some of the controls are familiar, as they were first seen in the Quick Titles window.



The adjustments available are:

- *Master Opacity* adjusts the opacity of the entire object
- *Surface* allows us to choose other surfaces for customization (more on this later).
- *Type* is where we select Solid, Gradient or Texture as the fill for this surface
- *Enable Surface* makes this surface visible
- *Base* is the color of the surface. Even with gradients and textures Base will provide a color to the surface.
- *Opacity* adjusts the transparency of this surface only
- *Enable Lighting* allows lighting to be used on this surface
- *Specular* is the color of the specular reflection created by the lights on the surface. It is the color of the lights reflection on the surface. Use the color well to assign any color you wish. White (the default) will reflect the light in its original color.
- *Emissive* is the color the object will emit when no light strikes it surface. This is the glow color of the object. You may set any color as the emissive color using the emissive color well.
- *Shininess* adjusts how shiny the surface appears when a light strikes it. 0 is dull finish (specular highlight area is broad), and a higher number is more shiny (specular highlight is smaller).
- *Environment* – See below
- *Overlap* – see below

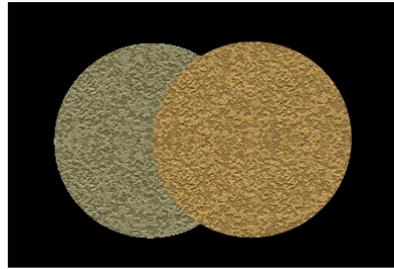
Environment Map

An Environment Map is a texture which can show up in the highlight areas of a surface. It is an enhancement to the basic specular reflection by adding a reflection of the surrounding environment to the highlight. You won't actually see the texture, as a very out of focus version of the texture is applied to the surface. If the object is moving or rotating, the environment map will be a little more noticeable.

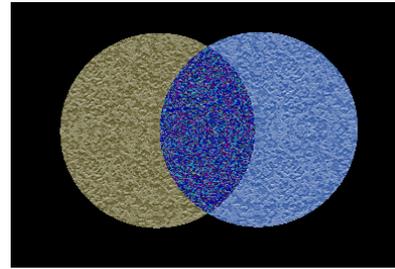
To apply an environment map, drag and drop a texture from the Texture Library into the 'texture well' to the right of the word 'Environment' in the surfaces property viewer.

Using Overlap

Usually, two overlapping surfaces do not interact. You may change this by choosing a method of interaction using the *Overlap* list box. Overlap effects work best on 2D layers.



Normal



Not-or



Banner covering bottom of text is Exclusive Or

Be prepared to spend time experimenting if you want to choose one of the alternative Overlap modes. They are:

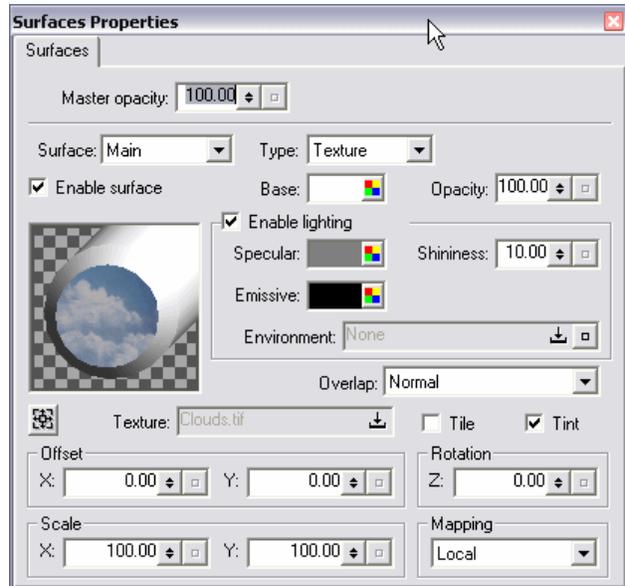
- Normal
- Invert
- And
- Exclusive Or
- Not Or

TEXTURE type Surfaces

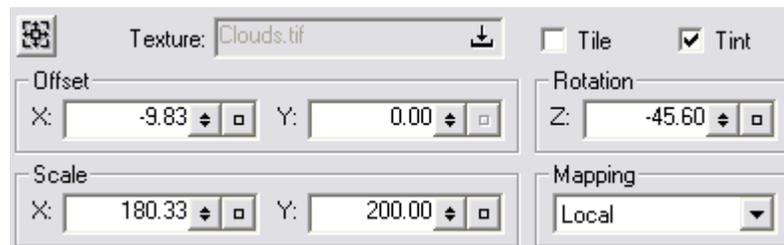
A texture is a graphic image that can be placed into or wrapped around your object.

If you change the surface type to *Texture*, a new panel opens at the bottom of the Surfaces Property viewer. To apply a texture:

- Drag it from the Texture library and dropping it on the Texture Well (to the right of the word Texture)
- Drag and drop a texture on the appropriate part of the Material Swatch.
- If you want to apply the texture to the main surface, you can simply double click on a texture in the texture library, or drag and drop it onto the object itself in the Monitor window.

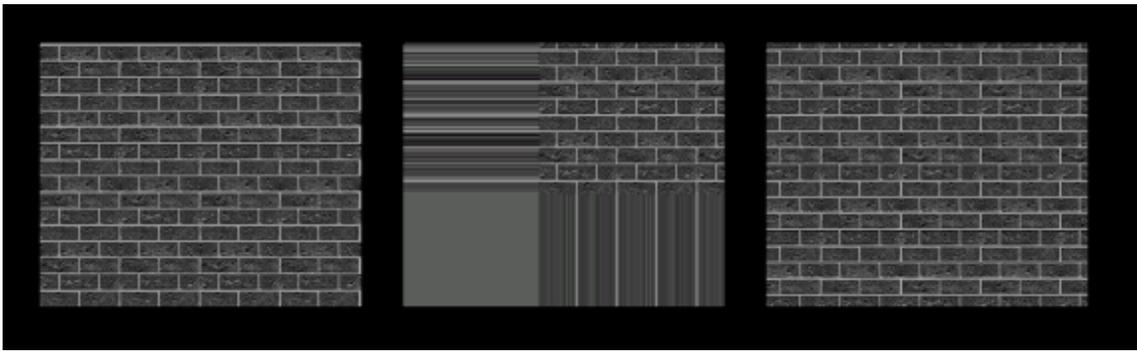


Standard Texture Settings



Tile: Tile OFF is the default, and the texture is stretched to fill the surface (container) to which it is applied.

Offset and Scale: If you reposition the texture using the X and Y offset controls, or shrink it using the X and Y scale controls, you will see off its edge. Turning TILE on will hide the resulting smear by tiling the texture instead of smearing its edge.



Texture applied to rectangle, and it is stretched to fill the object

If the tile is repositioned using the OFFSET controls or shrunk using the Scale controls, you see a smear off the edge of the texture

Activate Tile and the texture will repeat and if it is a proper tiling texture, the seams will be invisible.

Z Rotation rotates the tile inside the object.

Tint applies the currently selected color as a tint on top of the tile. Select white for no extra tint applied.

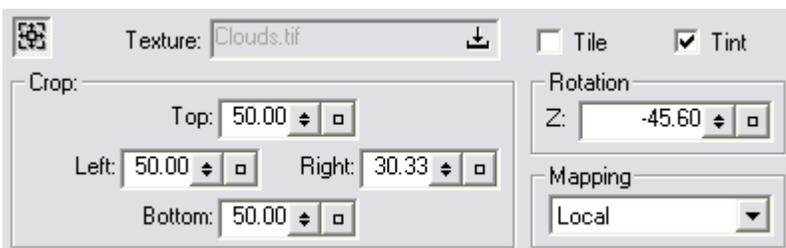
Mapping has three settings: Local, Container, Reflection

Local applies the texture to each object in the container, for example that is to each letter in a group of letters.

Container applies the texture to all objects in the container as a group, for example it applies the texture once across all the letters in a text container

Reflection will blow up the texture, blur it and apply it as if it is being reflected in the surface. The texture applied in this way makes the surface appear metallic. To see more of the texture as a reflection, scale it down.

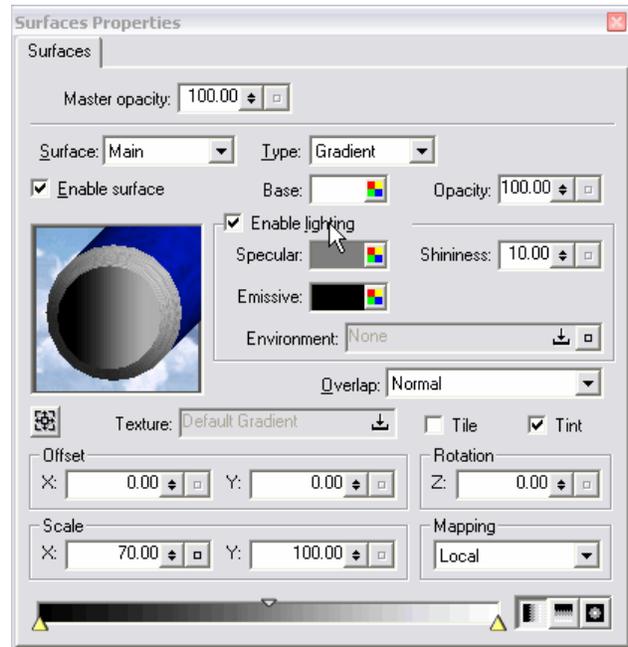
Cropping a Texture



Click the Crop button  to access the Crop Texture Controls. You may crop the top, bottom, left or right edges. You would do this if you only wanted to use part of a texture, or in cases where a TV frame grab you might be using as a texture has a black 'blanking' edge.

GRADIENT type Surfaces

If you select a Gradient as the surface type, a gradient selector area appears at the bottom of the Surfaces property viewer. This Gradient bar is used exactly the same as the one we explored in the Quick Titles window. It is also possible to use a Gradient and all the other Surface settings at the same time as a gradient.



Exercise 8

- Create a background object
- Add a texture to this surface. This will be the Background for your scene.
- Create some text. Extrude the text, add an edge. Place the same texture on both the letters and the edge
- Type a second line of text, and add a texture to it. In the Properties viewer, make this texture a Reflected texture (use the mapping drop down menu). Rotate these letters to see the metallic appearance of this reflected texture.

Module 9: Libraries

The Library windows display the contents on Marquee Libraries in virtual (not actual) folders. The contents of many of these folders can be copied, moved, created and deleted. Not all folders are editable however- the AVID folders contain elements which will not vary from system to system – and that is because you can't change them.

The Five Marquee Libraries

TEXTURES Allows access to Graphics files which you can apply to the surface of an object.

MATERIALS Properties related in more detail to how an object surface looks. These include things like color, opacity, gradient and Texture.

A material stores the settings from a single property viewer: the Styles Property viewer

STYLES A style remembers more parameters than a material. It remembers an objects settings from several property viewers, including Transform, text, container, shadow, surfaces, render, light, path, DVE. A Style can also store *animation* of these properties. The style does not store the object itself, just many of its properties.

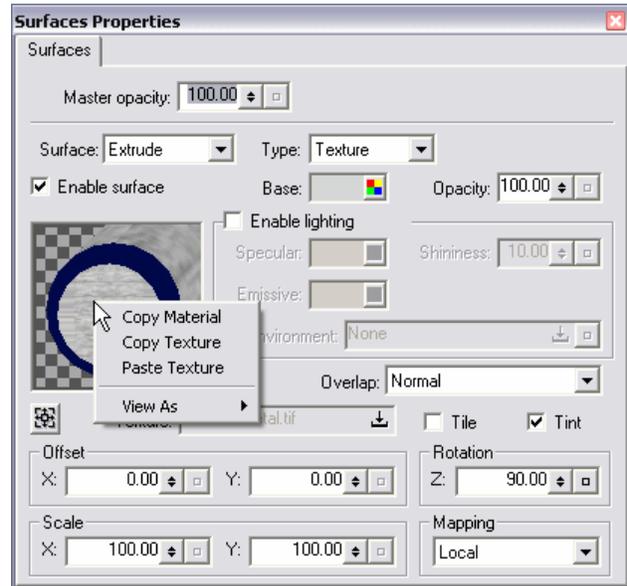
TEMPLATES A Template remembers all the Property attributes, as in a style, but also remembers the *OBJECTS* in the title. The actual text, lights, DVE's, paths, shapes and so on.

SCRIPTS Macro's or small programs which may act on the contents of your title to create complex behavior with minimal effort. Other scripts actually create titles – such as the Auto Titler script – which creates formatted titles automatically from a simple text file. TypeOn is another script which will type your text on screen character by character.

Textures

A texture is a graphic applied as a covering to a surface. Many textures are supplied in Marquee, and you can add your own as well. To apply a texture to a surface of your object:

- Double click on a texture to apply it to the main surface of all selected objects
- Drag a texture from the library and drop it on the object in the Monitor window. This applies the texture to the Main (front) surface only.
- Drag a texture from the library and drop it on the Texture Well of the surface you want to apply it to in the Surface Properties viewer
- Drag a texture from the library and drop it on the surface you want to apply it to in the Material Swatch graphic of the Surface Property viewer
- Use copy and paste: right click on the texture in the Library and choose COPY, right click on the Material swatch in the surfaces prtoperty viewer and choose Paste (see right)

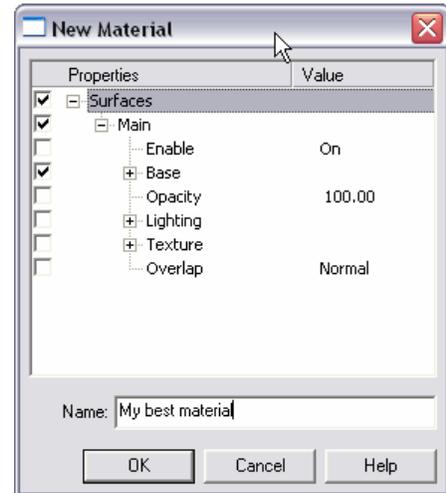


Right Click on Material watch

Materials

A Material is a combination of surface properties, as listed here in the New Material dialogue. Notice a material does not have a 'face', that is it is not related to the main surface, extrude, bevel or background. It is just, plain and simple, a surface defined by its color, opacity and other properties.

Check marks appear in the non-default parameter, that is for the parameters which you changed. You can add check marks to the other parameters if you wish, and this will ensure they are set to the defaults when this material is applied to a surface.



To save a material:

- Right Click inside the Materials Library and choose New material. The current Main Surface settings will be saved as a material in the library.
- Copy and Paste: right click on the surface in the Sample Object of the Surface Property viewer. Choose COPY. Right click in the Materials Library and choose PASTE.

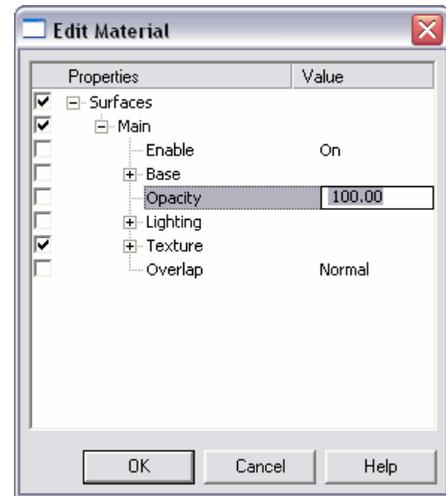
Materials are applied the same way Textures are:

- Double click on a material to apply it to the main surface of all selected objects
- Drag a material from the library and drop it on the object in the Monitor window. This applies the material to the Main (front) surface only.
- Drag a material from the library and drop it on the surface you want to apply it to in the Material Swatch graphic of the Surface Property viewer
- Use copy and paste: right click on the texture in the Library and choose COPY, right click on the Material swatch in the surfaces property viewer and choose PASTE

To Edit a Material

Right click on a material and chose Edit. A dialogue similar to the New Material box appears. You may add and remove checkmarks, and also in some fields actually click on values and type in new ones, as shown here with Opacity.

You cannot edit an Avid material, but you can use the context menu to copy and paste it into a user or site folder where the copy will be editable.

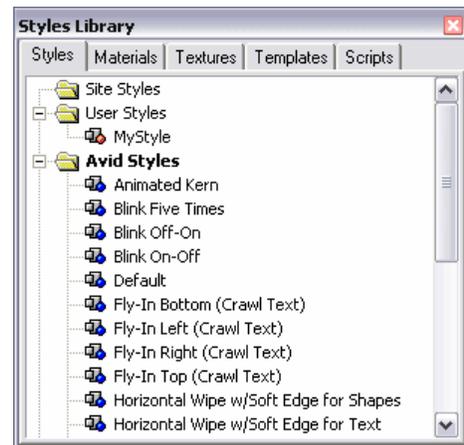


Styles

While a material remembered the settings from one property viewer, a style remembers the settings in all the property viewers shown below in the *New Style* dialogue box. It does not remember the object itself, but remembers a lot of its attributes.

There are two icon types associated with styles. The icon with a blue dot contains animated properties, and will be rendered out of Marquee as an animation. This takes longer than the creation of a non-animated title. The orange dot effect is, of course, this non-animated title which will normally render out as a static title in the AVID editing system.

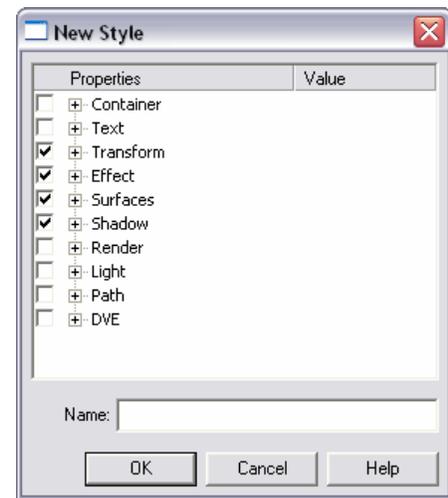
You should explore the available styles. There are many pre-built effects for blinking, sliding, wiping, rotating, flipping. You might consider Styles the simplest way to apply a (preset) animation to your objects!



Saving a Style

- Select the object from which you wish to create the style, then right click inside the Styles Library and choose New Style. The current settings will be saved as a style in the library.

As before, any non-default values appear already checked. You can add check marks to lock extra default parameters in. You may wish to deselect some parameters if you don't want to change these attributes for the objects which are the target of the style. For example, uncheck Transform so when you apply the style you do not change the objects size, position and rotation.



If a property is animated it will appear as italicized text in this dialogue.

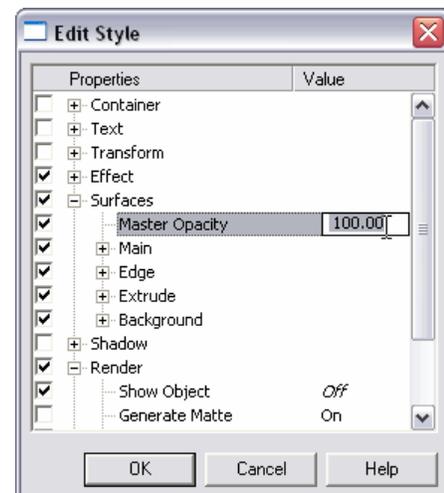
Applying a Style

- Double click on a style to apply it all selected objects
- Drag a style from the library and drop it on the object in the Monitor window.

Editing a Style: Basic changes

Right click on a style and choose Edit. The Edit Style dialogue appears, and it is used essentially the same way the Edit Material dialogue is. You may add and remove checkmarks, and also in some fields actually click on values and type in new ones, as shown here with Opacity. Fields who's names are italicized indicate parameters which are animated. Normally, do not change these values here directly.

You cannot edit an Avid style, but you can use the context menu to copy and paste it into a user or site folder where the copy will be editable.



Editing a Style: More advanced changes

If you want to change parameters that cannot be accessed through Edit Style, you can apply the style being altered to a dummy object, change the parameters, and re-save the style with the new settings.

Templates

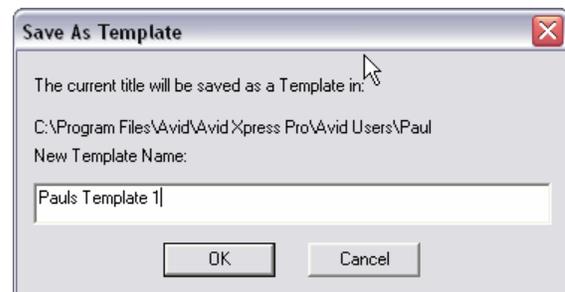
A template remembers all the property viewer settings, as in a style, but also remembers the nature of the objects themselves and their environment. A template contains the actual text or shapes, along with their attributes. As well, they can remember the environment in which the objects live – the lights for example.

When a template is added to a title all its objects are added to whatever is already there. They do not replace or remove objects already in the title. A result of this is that you can apply more than one template at a time to a title.

Templates are useful for saving standard title formats, for example lower third supers. But this is only the most obvious example. Templates can contain backgrounds, rolls or crawls with most names and logo's already in place, weather maps with libraries of symbols and completed opening animations. You owe it to yourself to explore the library of AVID templates to get a better idea of the scope of what is possible. Also, remember you can copy and paste a template into a user or site folder where you can modify it for your own use!

Saving a Template

- Create the title which is to become the template
- Lock objects in the title if appropriate to protect the templates integrity when it is used.
- Select these objects which are to be part of the template.
- In the Template library, right click in the folder in which you want to store the template. You cannot add (or delete) to the AVID folder. Save As Template appears (right)
- Type a name and press OK



Apply a Template

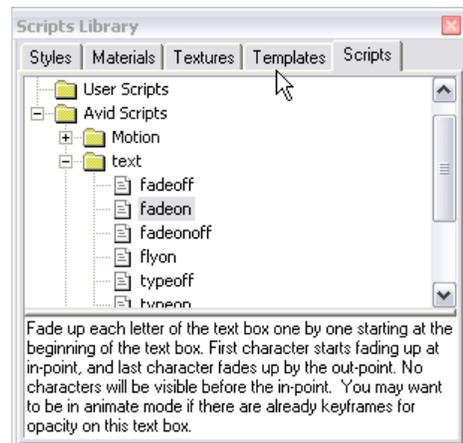
- Create or open the target title
- In the Template library, double click on the name of the template you wish to use.

The objects of the template are added to the title complete with all their objects, properties and animations.

Scripts

A script is an automated process you can apply to a title, or to an object in a title. Scripts come with your Avid editing product, and new ones need to be developed by Python programmers. In most cases, you will only have access to the AVID supplied scripts, and the other folders (User, Site) will remain empty.

Some scripts fade objects up or down, fly objects on or off the screen, delete or move keyframes, type characters onto the screen or even make new titles from a text file!



Learning about a script

If you single click on a script name in the script window, text appears at the bottom of the script window telling you what this script does, and how to setup to run it.

Applying a Script

- Since most scripts are designed to modify objects, we often begin by selecting one or more objects in the monitor window or the layers viewer
- Double click on the scripts name in the Script library

Running Autotitler

Probably the most used script is AutoTitler. This creates a number of titles from a plain text file. You create a master title, create a text file with all the supers typed out, and run the script to convert the text file into numerous individual titles. A common application of course is for the creation of lower third titles – or ‘name straps’.

- Create the master title, the one you will be duplicating. Add and style some text in this file so the title looks like the final version you want. The text you type is of no consequence, it will be replaced. You might like to save it as a template for future use.
- Name the text fields in your title “Text Box 1”; “Text Box 2” and so on. *Text Box 1* text field will get the first line of text from the ascii file, *Text Box 2* will get the second line of text from the ascii file, and so on. Text fields are named in the Info property viewer (Window > Properties > Info).
- Prepare a plain text, ascii text file with the supers in it. Place each line of the super on a separate line in the text file, and separate titles by a blank line. No Unicode allowed.
- With the reference title open, double click on the ‘AutoTitler’ script in the Script window. A dialogue will ask you to choose the text file you want to use. Your titles will be created.
- If your text file has too many items for the available text fields, an error message appears, and then you may choose to let the script continue or stop.
- If your text file has too few items for the available text fields the original text in the sample title will be placed in the field. If the original text fields were blank, then the (empty) text fields will be blank also. This allows you to create titles with multiple fields when you may have differing numbers of entries to make on each title.
- The created titles can be reviewed, and then saved if desired. *Save All To Bin* from the file menu might be useful in these circumstances.

On older Avid systems, AutoTitler was a script. Now, on the newer systems it appears as a menu item under FILE. On newer Avids then, follow the above instructions and then select FILE > AUTOTITLER to run the ‘macro’.

Inside the Libraries: Library Folders

While we have been working with Library windows, it is now time to look more closely at their structure.

Each library has a folder structure that is organizational, and does not reflect where files are actually stored on your hard drive.

AVID Library elements in this folder are supplied by AVID, are read only, and cannot be modified. Anything you use from these folders will be available on any AVID of the same type and version. You may Copy and Paste these items into other folders so they can be modified.

User These folders contain objects saved here by the current user. On your hard drive, they will be placed inside the Avid User folder under the name of the current user. In other words, they are conveniently placed in the AVID USER folder with the user's other settings. The folder itself is named MarqueeUserFiles. Use these folders for your personal settings which you do not intend to share with other users.

If you do want to share or move these settings, simply move this entire folder into the User Settings of another user or into your user settings on another system. All your User folders from Marquee will then be available on that system.

Site These Library elements are available to all users on the system, and you should store elements here that multiple users will need to access. Elements you place here are stored in a folder in the same directory Marquee is installed in.

Title Items in this folder are visible / saved as part of the title itself. They are only available when the title is opened in Marquee. They are not visible when working on other titles, and so do not continually appear, and possibly clutter up, your Library display. Also note that elements in this folder can be in various directories on your hard drive. For example, if you use an image in your title it will appear here (under textures). The original file (wherever it is located) is being used, a copy has not been made or moved into some other location. The image is also not stored as an actual part of the title.

Saving and applying Library Elements

Adding to a Library

- Select the reference object from which you want to create the library entry
- In the Library window, click on the tab for the element you wish to save- texture, style, material or template, as described previously. We will use the 'Material' folder in this description.
- Right click on the folder in which you would like to save this library item.
- Chose 'NEW' from the context menu
- Place checkmarks into the checkboxes beside the attributes you wish this material to save.
- Click "OK" to save this material

If you leave something unchecked, its attributes will not be saved as part of the library. This is actually very useful. You can save main surface colors without changing other properties, for example.

COPY or MOVE Library Element

- Right Click on the source element to access its context menu
- Choose CUT (to move) or COPY (to copy) the element
- Right click on the destination folder
- Choose PASTE from the context menu

You may copy from, but not into, the AVID folder. As well, you cannot MOVE (use CUT) within the AVID folder

Rename a folder or element

- Right Click on a folder or an element to access its context menu
- Choose Rename
- Type in a new name

You cannot rename the AVID folder or its contents.

Delete a folder or element

- Right Click on a folder or an element to access its context menu
- Choose Delete

The item is deleted immediately. You cannot delete from the AVID folder.

Promoting Title Tool Styles to Marquee

Now that you know what a style is, you might have some title tool styles you want to use in Marquee. This can be accomplished by Promoting Title Tool styles to Marquee, either all at once or one at a time. Promoted Title Tool styles are saved as Marquee User styles, and does not delete or change the original styles from which they came.

Convert All Title Tool Styles

This is a time limited offer. The first time you start Marquee, and until you save any style, texture or material, you will be asked if you want to convert all your styles. Choose yes to do so. Once this dialogue is gone, it cannot be called up again. You can still convert Title Tool styles one by one.

Converting Individual Title Tool Styles to Marquee

- From the Settings tab of the project window, find the name of the style you wish to convert.
- Double click on the style name
- Click on the “Convert To Marquee” button at the bottom of the style sheet.

If the style already exists in Marquee, you will see a dialogue box in which you can choose to cancel, overwrite the existing marquee version or allow multiple versions with the same name.

Some warnings:

- Only True Type fonts will convert to the same font in Marquee. Other fonts will use the marquee default font.

- Bold and Italics will only convert if a Bold or Italics version of the font is present. The BOLD and ITALICS buttons in the Title tool have no equivalent in Marquee
- Small adjustments of Kerning, shadows, borders, corners, gradients may be required.

Adding Graphics to your Marquee Title

The Default Background

By default, Marquee shows you the frame you parked on in the editing application as a background. This is for reference only, and does not become part of your title. You can click on the Background button to hide this image, if it is interfering with your observation of the title. You can change the background image by returning to your editing application and changing the park position of the recorder.

Graphic As An Imported Background

A graphic image may be imported as a background. It will be clipped to the frame (if too large) or padded out with black (if too small). If there is an Alpha channel, it will be used in Marquee and only the appropriate portions of the image will be visible.

Imported backgrounds cannot be moved, scaled or positioned. They are centered on the frame, and are rendered out as part of your title.

- To add a background, chose FILE > IMPORT > BACKGROUND
- To remove a background, choose EDIT > CLEAR BACKGROUND

Import Graphic as an Image

If you wish to import a graphic to use as part of your title, rather than as a background, you can import it as an Image. An Image is treated as any other Marquee object is. In fact, if you wish you can select your image and apply a main surface color to it to tint the image. Images appear in the bottom of your Textures Palette. The Image file however is not copied to an .mqp file, neither is it copied into any folder within the AVID editing application. You may need to manually ensure the image file is available for future versions of this title.

- To import an Image, choose FILE > IMPORT > IMAGE

EXERCISE 9

- Create a title with at least a gradient in one line, an edge and a shadow.
- Save this “look” for later re-use. Save it as a Material. Save the same thing as a Style. Save it as a Template. Note the difference in what is saved in each case.

Module 10: The DVE

Many of us know “DVE” as a generic term for Digital Video Effect, as created by an older generation of digital video effects equipment in linear edit suites. This is not that DVE!

This DVE is an objects which you can deform into spheres, page curls and ripples. You can twist them, texture them, position them and light them in 3D space.



Sphere DVE with texture map of the Earth applied

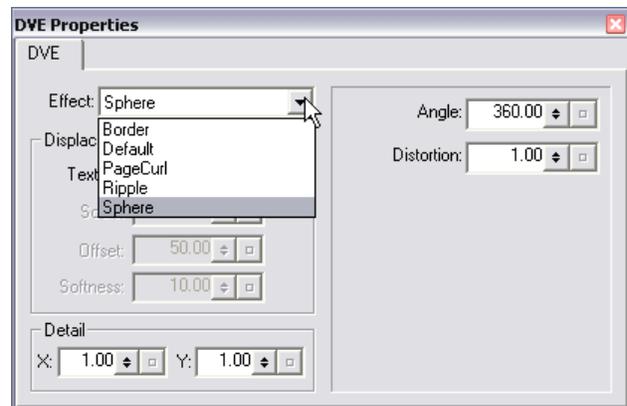


Rippled DVE with lights to create a background

For a true 3D effect, you will of course need to enable lighting for the DVE.

Creating a DVE

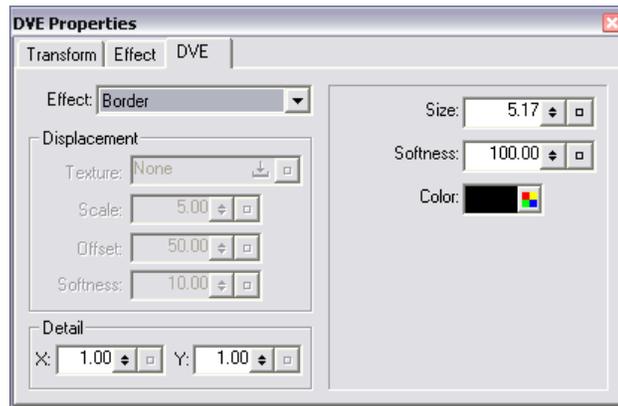
- From the Object menu, chose Create DVE. A full screen sized rectangle appears in your title.
- Open the DVE Properties viewer (Window > Properties > DVE) and choose the type of DVE you want, and its parameters.



DVE Types (Effects)

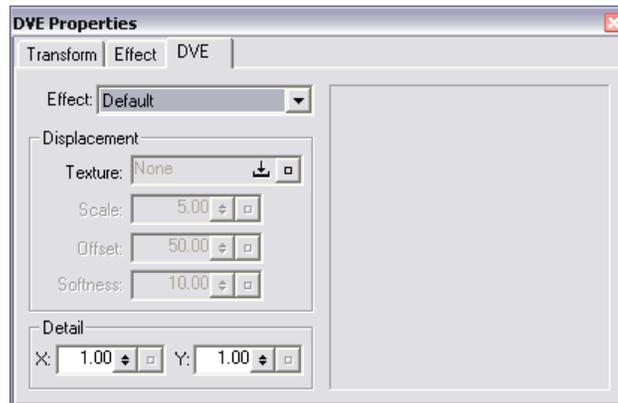
From the top of the DVE Property viewer you may choose what shape you want this DVE to be. The choices are:

Border



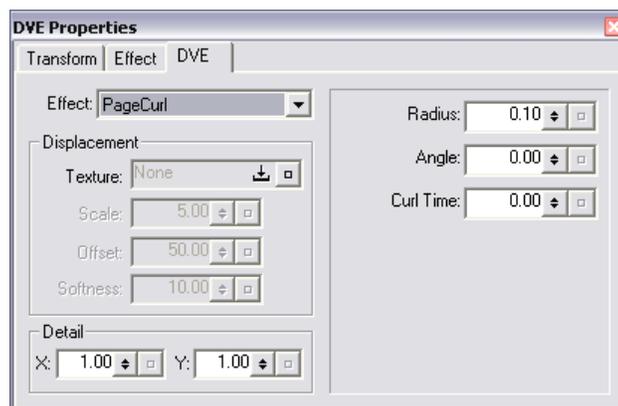
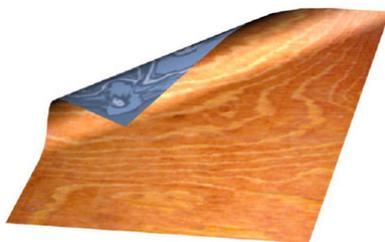
Places a colored frame around the image. The frame takes away part of the image. Frame width, color and softness are adjustable.

Default



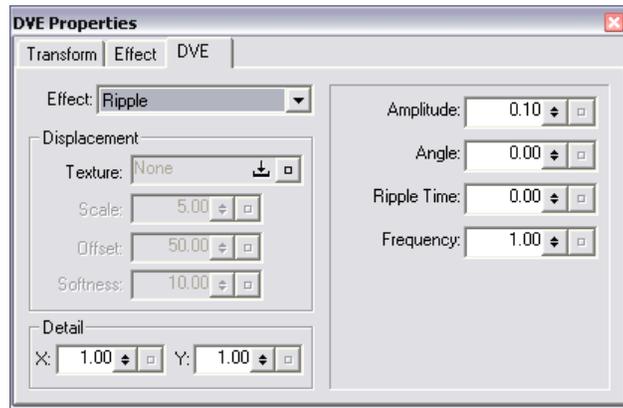
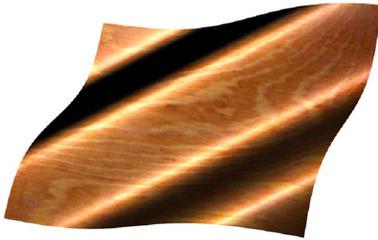
The default is a rectangular surface the size of your title frame.

Page Curl



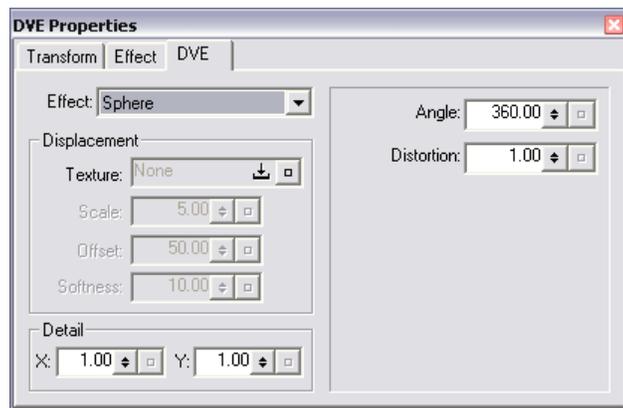
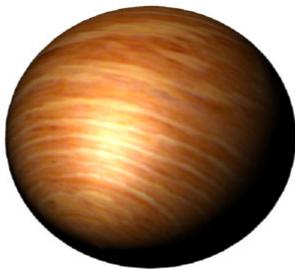
Curled the page like a page in a book, revealing the back surface. Radius is the tightness of the curve, angle is position of the curl on the surface. And curl time is amount of the curve. Curl time is what you would animate to completely curl the page on or off the screen.

Ripple



Ripple creates parallel waves across the surface. The number, angle and height of the waves is adjustable. Amplitude is wave height, Angle is angle of the wave on the DVE, Ripple Time is what you would animate to move the wave across the surface, and frequency controls the number of waves present.

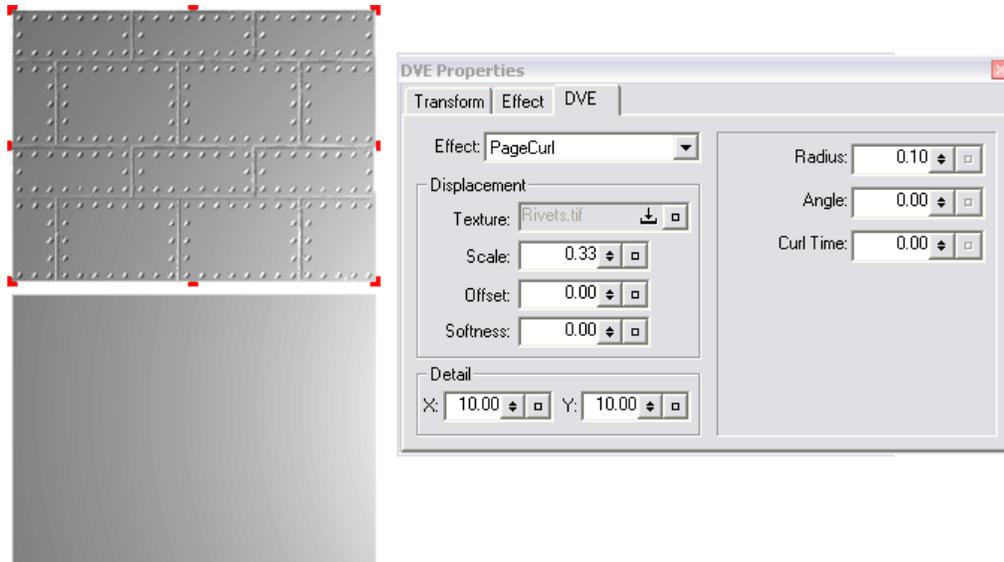
Sphere



Sphere creates a sphere or a cylinder, depending on the settings. This is the oddest DVE with the most variations, some rather odd! Angle and distortion are the two controls you want to explore to get the most out of this shape.

Adding a Displacement Map to a DVE

You may use a texture to add bumps or texture to the DVE surface. The texture you use has its light and dark tones translated into lowered and raised portions of the DVE surface. The alpha channel of the graphic has no effect on the displacement map.



A Texture – Rivets – applied as a displacement map (top, and settings in DVE Property viewer) and a standard DVE without the displacement map (bottom)

When using a displacement map, pay particular attention to the Displacement settings, and the Detail adjustments. Detail will bring the texture into ‘focus’ at its maximum setting of 10. At the default setting of 1.00, your texture will be visible, but hardly recognizable as it will be so averaged out.

EXERCISE 10

- Create a Sphere using the DVE.
- Place two or three lights around your sphere to clearly show its shape
- Import a texture of the earth to your Textures folder
- Add a texture of the earth to your sphere.
- Save this as a Template

Module 11: Rolls, Crawls, Path Text

Introduction

This module is about moving font within Marquee. Specifically, we will look at Rolls, Crawls and Path Text.

Creating these three types of text is easy. What may not be obvious is what is going on behind the scenes. To really master these types of text, you need to understand the different types of Marquee titles, and how Marquee sets – or doesn't set – the title durations. Specifically, we will explore in this module:

- The four Marquee title types: Static Title, Roll, Crawl, Animated titles
- Setting Marquee Durations in the FILE > PREFERENCES and FILE> DURATION dialogues
- Creating Rolls
- Creating Crawls
- Creating Path Text

The Four Title Types

Text Types

A **static title** doesn't move. In the Avid world, this also means nothing else moves. Not a letter, not a shadow, not a light.

Rolls are the standard method of presenting credits at the end of a program, where the credits start off screen and then move from the bottom to the top of the screen.

Crawls are where the titles move across the bottom of the screen, usually from right to left, and usually a single line tall at a time.

Path Text is where text is not typed in a straight line, but is attached to a shape created by the editor. This shape can be a square, circle or any path drawn using the pen tool. Once the type is placed on a Path, it can be moved along that path by making it a crawl.

STATIC Title

A static title is a single frame of non-moving text. It is also a frame in which there are no moving lights or other objects. Because everything is static, when this title is saved to your bin, Marquee creates a single static image. This image appears in the bin as a 2 minute long title. There is no control in Marquee over his duration. The static title renders very quickly, plays as a real time effect and is similar to a title from the regular Title tool.

ANIMATED title

This is a title in which there is movement. There may be movement of the title text or other objects in the frame. There may be moving lights or shadows. In any case, this results in change occurring from frame to frame. As a result, Marquee needs to render every frame of the animation, not just a single frame. This of course takes longer, and the result is actually a movie. This movie – animated title – appears in your bin at a specific duration and as a real time matte key. The duration of the title in this case is controlled in Marquee, it cannot be changed by trimming in the timeline, as with a regular title.

ROLL title

A roll is a title in which the text moves (usually) from the bottom of the screen to the top of the screen. If certain criteria are met, this title can be created internally as a group of static ‘cards’ that are simply scrolled up the screen. In this case, only a few frames need to be rendered. Marquee places the final title in the bin at a duration that varies with the number of screens of text. It allows 1 minute per screen.

You can preview the Roll in Marquee at a Duration you set in Marquee. In this case the Marquee duration does not effect the length of the final roll. That is controlled by how much of the title you edit into your timeline in the editing application, and where you may place scroll keyframes there.

If the Roll is not simple, it may need to be rendered as an animation. If there are lights, other objects, clipped edges or one of several other conditions, the title changes frame by frame and again Marquee must render out each and every frame. We say this is no longer an Avid Rolling Title, but an Animation. It will be rendered as a real time matte key.

CRAWLING title

This is handled the same as a rolling title. If it is simple and meets certain criteria, it is called an Avid Crawling Title and is made up of several single frames of font which the avid slides across the frame. The duration set in Marquee is for preview only, the on-screen duration is controlled by how you edit and manipulate this crawl in the timeline. If you add lights, other objects and otherwise fail to meet the criteria for an Avid Crawling Title, it will be rendered out frame by frame into an animation. In this case the duration of the animation does match the Marquee duration.

PATH TEXT title

If you type text onto a line or shape, we have text applied to a path. If the text does not move – if it is static text – then the title is rendered as a single frame and we have essentially a Static title as described above.

Text on a path can be designated as a Crawl then this text can be animated along the path. Now every frame must be rendered, and once again we are looking at rendering the title as an Animation. This takes longer, and the duration of the title is once again determined by the Marquee duration.

Avid Rolls, Avid Crawls and Animated Titles

Rolls and Crawls can be saved internally as a series of static images which are scrolled across the frame. This is possible if they meet certain specific requirements. For example the title must fill the height (Roll) or the Width (Crawl) of the frame, have a single text object, contain no other objects of any kind, move at a uniform speed, text object is not animated except for the crawl or roll). This type of Roll or Crawl will behave in the Avid editing application the same as a roll or crawl from the original Title tool, and will be able to have its duration modified and parameters edited in a simple manner. It will also be a real time effect in the editing application. Titles of this type are called Avid Rolling Titles or Avid Crawling Titles.

Their length (in time) is a minute per ‘page’, which is why Rolls and Crawls seem to come up at various random durations in the editing program. The Duration set in Marquee in this case is for previews only, and has no impact on the duration the title will be when saved into the editing application.

If the Title or Crawl has certain attributes, such as lights, changes in scale or rotation, it cannot be portrayed internally as a series of static frames and needs to be rendered out as a movie instead.

For example, if you have a light on in a Roll the lights effects changes with every frame, then every frame of the title will be different as the title moves, and now in effect Marquee will need to render out not a single frame, but a separate frame for every bit of your title. Marquee must render the title as a movie.

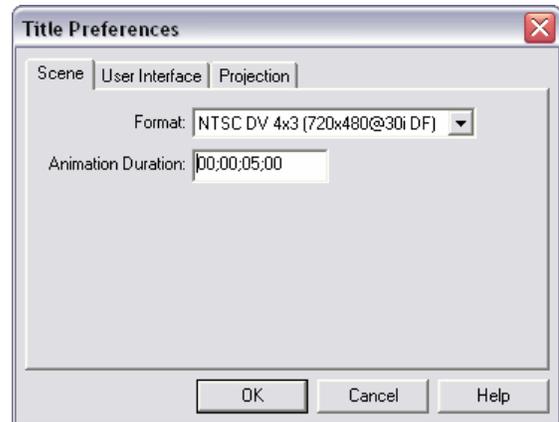
This is what we call an Animated title, and it takes longer to render. It is passed back to the Avid editor as a real time moving matte movie. This type of title is called an Animated Title to reflect the fact that it is an entirely rendered movie. As such, changing the roll duration usually requires a complete re-rendering of the animation. When you need them, this may be a small price to pay for the inclusion of lights, moving textures and other sophisticated effects in a title roll or crawl.

The length of an Animated title is rendered out at is the duration of the title in Marquee. How do we set this? Glad you asked....

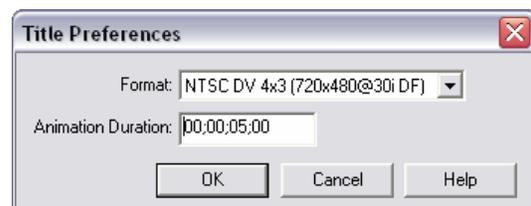
Setting Title Durations in Marquee

Marquee has three places where duration can be set:

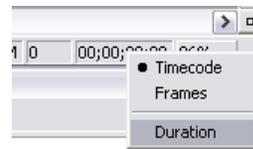
FILE > PREFERENCES > CURRENT TITLE



FILE > DURATION



Right click in the Time Display area and choose Duration from the popup menu:



For Static, Avid Rolling Titles and Avid Crawling titles, the durations are for previews only. They do not determine the final length of your title. You will do that in your editing application.

For Animated titles, this duration will determine the length of your animation, and thus the length of your title.

When you change the duration, all the moves on your title scale to the new duration. Changing the duration of a title will never clip any movement, or add dead space at the end of your title. Everything scales to fill the new duration.

Rolling Titles

Creating a Rolling Title

A roll may begin by typing text on the screen in the normal way, and then designating the frame as a Roll. If you are taking this approach, a text field can be designated as a Rolling text field or a Crawling text field by right clicking within your text with the text tool, and choosing MOTION > ROLL or MOTION> CRAWL.

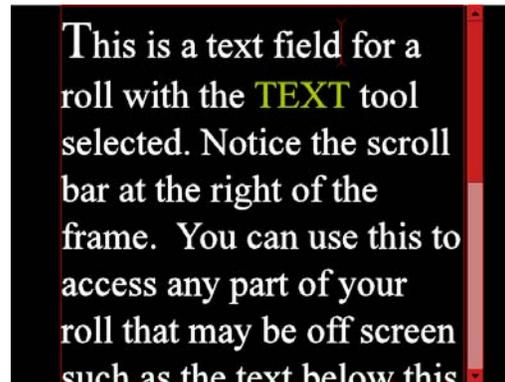
If you know you want rolling text title before you begin, there are faster ways. For example, simply click the ROLL button in the Toolbox. This creates the text field, and designates it as a roll for you. The text field is also perfectly proportioned – it is the full height of the frame, and the left and right edges are adjusted to TV safe.

If a text field is already present and has been selected, you may also click on the ROLL button to make the height of the text field fill the frame without changing its width.

A second automated way is to use the Rolling Title Template- simply open the Template library and double click on the rolling template you wish to use.



Empty Text field for a roll, ready to Type in the text



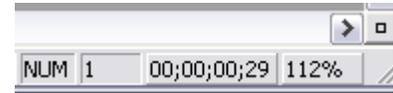
Roll text field with text entered. If there is more text than screen space a scroll bar appears and the font scrolls off the screen.

The Rolling Font disappears- scrolling through the Roll

When you choose the EDIT tool, your text disappears. This is because Marquee is setting your roll up at its start position, where all the text is off screen. To see your text again, choose the TEXT tool and click on your text object. The text, along with the scroll bars, reappears.

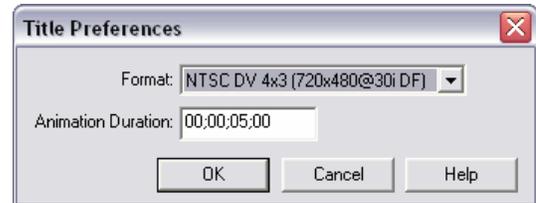
There is another way to see your text. A roll or a crawl in Marquee has duration – by default 5 seconds. If you scroll through the Marquee ‘timeline’ you will see the Roll occurring.

To do this, click and drag back and forth on the time code number at the lower right of the Monitor window. Hold CONTROL to scroll more slowly. Hold SHIFT to scroll more quickly



Setting the Roll Duration

To change the duration of any animated title, choose FILE > DURATION and enter the new, desired duration. Any animation you had is now rescaled to fill the new duration. No part of your movement will ever be clipped, and no pauses or holds will be added at the end of your animation using this Duration feature.



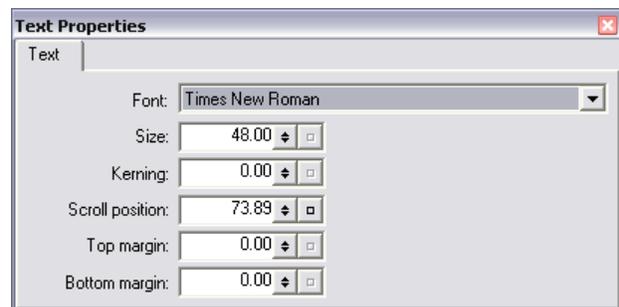
If your title is not an animated title, the duration you enter here will be used in Marquee for previews, but will not determine the final length of your title.

Setting the Roll Scroll position

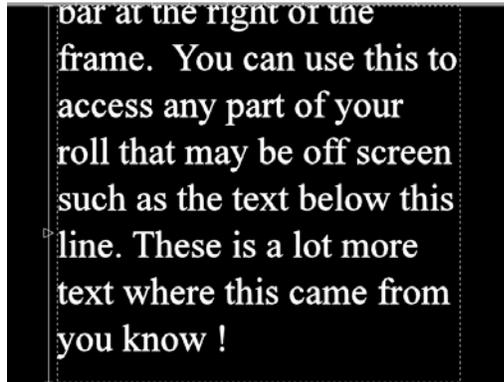
Normally a Roll or Crawl starts off screen, and ends off screen. Indeed, if it does not the roll or crawl must be rendered as a movie, called as you know an Animated title. Sometimes however you may want the scrolling to be different. At the end of a roll you may want to stop and hold on a logo, or during the roll you may need to change speeds at some point. This is possible by animating the Scroll position. Animation is covered in the next module, and there you will learn how to animate the Scroll position. We will however look at how to change the scroll position here.

There are two ways to change the scroll position.

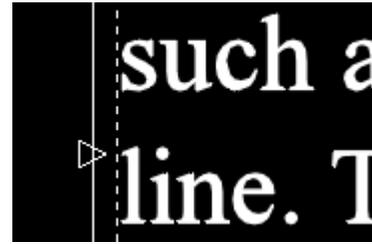
The first method is to use the Text Properties viewer. The scroll position is available here. If a text field has been selected with the Edit tool, then as you change the scroll position value, you will see the font reposition on screen.



The second method to change the scroll position is to use the scroll position slider which you can call up. To see this slider attached to your scrolling text, deselect the text field and then activate the Text tool.



Text field with Scroll position slider at the left.



Close Up of the Scroll position slider

As you change the scroll position using either of these methods, you are changing the titles scroll position property. This is one of the things that makes the title an animated title, which takes longer to render and is less flexible than a regular Roll or Crawl.

We do not use the scroll position as a tool to view the hidden portions of our roll or crawl. We use it when we want to alter the default animation of the roll or crawl. To view hidden text in a roll or crawl text field, we activate the text field with the Text tool to bring up the scroll bars.

Adjust Roll and Adjust Crawl buttons

We saw that clicking the Roll or Crawl buttons made a valid text field for a roll or a crawl in your title. These buttons may also be used to modify an existing text field so that it is a legal Avid Title Roll or an Avid Title Crawl which can be created without extensive rendering. Remember, you don't need to have a 'legal' roll or crawl, in that case an 'illegal' roll or crawl simply means it will be rendered as a movie.

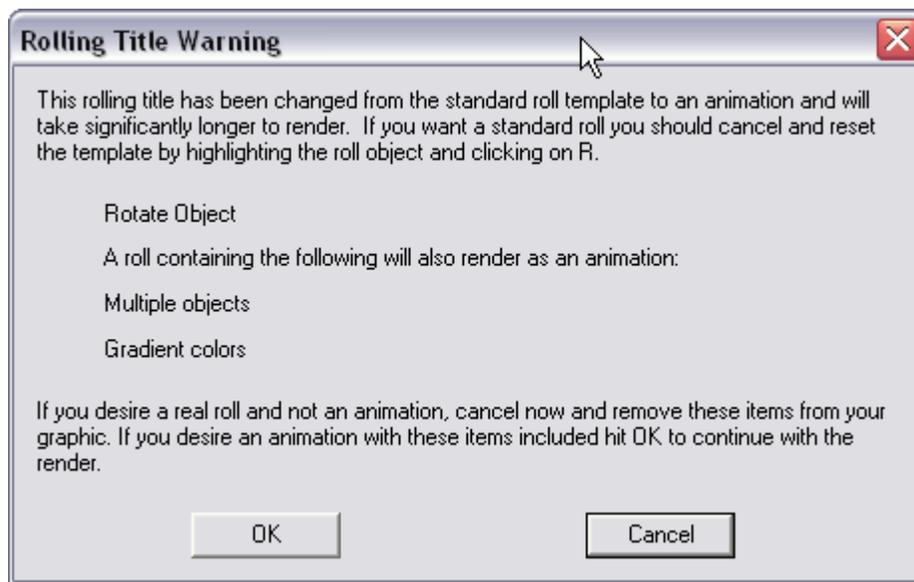
Select a text field and click the R or the C button in the Toolbox and Marquee will attempt to setup the title as a Roll or a Crawl using that object. It will adjust its scroll position to start at 0 and end at 100, it will adjust its height to fill the frame, and so on.



If there is some problem that requires your attention before this task can be completed, an error message will appear warning you that something needs to be changed. Make the change and try again!

Saving a Rolling Title or a Crawling Title

FILE > SAVE TO BIN will save your title to the Avid application as usual. When you go to save a Rolling Title which has some characteristics which will make it render as a movie, this dialogue box will appear:



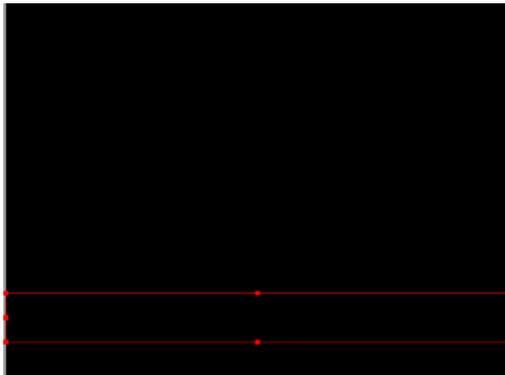
This does not mean you cannot proceed, it just indicates that the roll or crawl is of such complexity that each and every frame needs to be rendered out, and this will result in outputting an Animated movie which will be the title. If this is OK, press OK. If not, press CANCEL and fix any problem which is creating the Animated title unnecessarily.

Crawling Titles

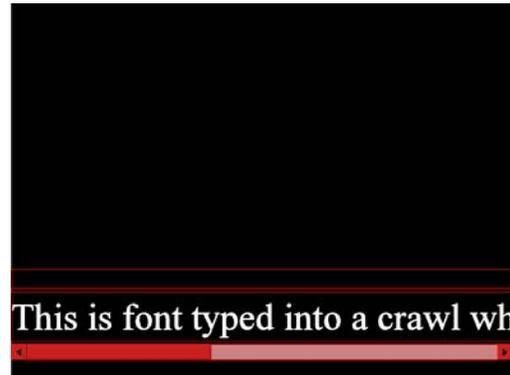
A crawling title has much in common with a rolling title.

Creating a Crawl

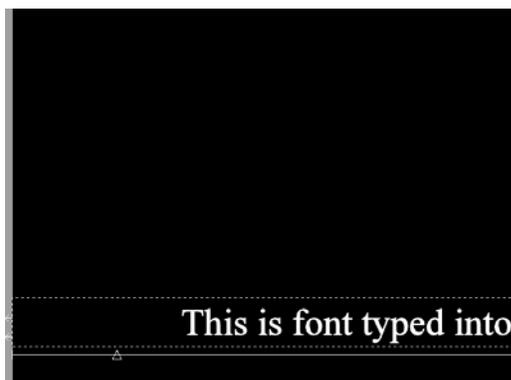
- Create a text field. With the Text tool, right click inside the text field and chose MOTION > CRAWL
- Click the CRAWL (C) button in the Toolbar to create a Crawl text field
- Select an existing text field and press the CRAWL (C) button in the toolbar to modify an existing text field into a Crawl text field
- From the STYLES library, chose one of the specially programmed crawls to fly text ON and OFF the screen
- From the Templates Library, choose one of the preset Crawl templates



New Crawl text field with no text yet entered



Crawl text field with text entered,
and scroll bar now visible



Crawl text field with Scroll position arrow visible. This is done by deselecting the text field (click away from it with the Edit tool) then activating the Text tool

The Crawling Font disappears- scrolling through the Crawl

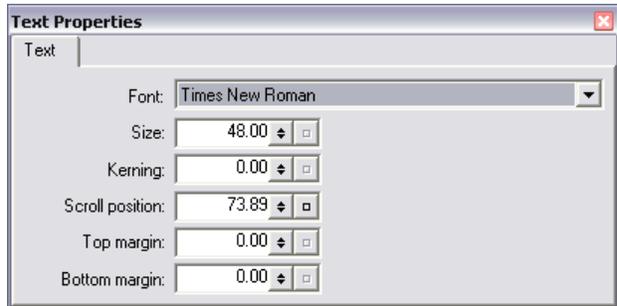
When you choose the EDIT tool, your font disappears. This is again because Marquee is setting your crawl up at its start position, where all the font is off screen. To see your font again, choose the TEXT tool and click on your text object. The font, along with the scroll bars, reappears.

You may also scroll through the 'timeline' for the crawl by clicking and dragging on the time position numbers in the lower right corner of the Monitor window. Click and drag back and forth to rock through the crawl. Hold SHIFT to move more quickly, hold CONTROL to scroll more slowly.

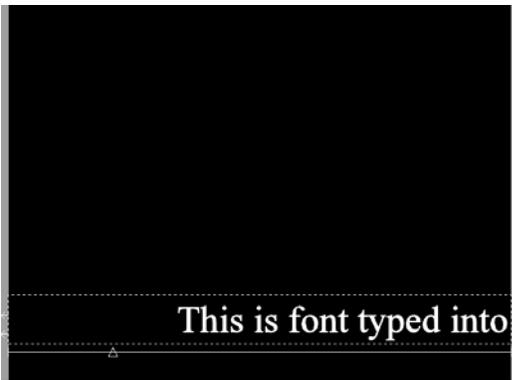
Setting the Crawl Scroll position

This is done as with a Roll.

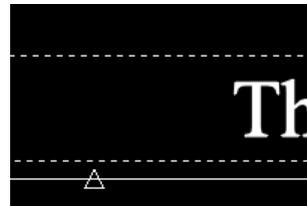
Use the Text Properties viewer to adjust the scroll position



The second method to change the scroll position is to use the scroll position slider which you can call up. To see this slider attached to your scrolling text, deselect the text field and then activate the Text tool.



Text field with Scroll position slider at the left.



Close Up of the Scroll position slider

Adjust Roll and Adjust Crawl buttons

The Crawl button may also be used to modify an existing text field so that it is a legal Avid Title Crawl. Select a text field and click the C button in the Toolbox and Marquee will attempt to setup the title as Crawl using that title object. It will adjust its scroll position to start at 0 and end at 100, it will adjust its width to fill the frame, and so on.

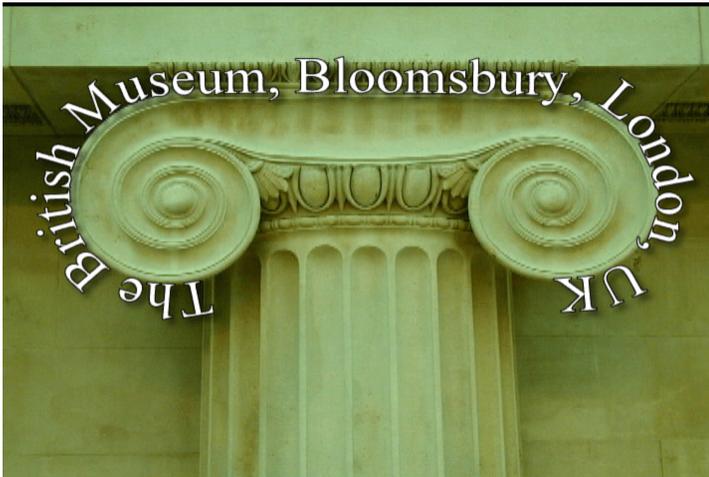


If there is some problem that requires your attention before this task can be completed, an error message will appear warning you that something needs to be changed. Make the change and try again!

Saving a Rolling Title or a Crawling Title

FILE > SAVE TO BIN will save your title to the Avid application. When you go to save a Crawling Title which has some characteristics which will make it render as a movie, a crawl warning dialogue will appear. You may proceed to render an Animation, or cancel and fix whatever is causing the title to render as a movie instead of an Avid Crawling Title.

Text on a Path



Path text offers a lot of creative value for little effort. Marquee makes it very easy to place text on shapes- or paths. These can be geometric shapes – squares or circles you draw with the Rectangle or Ellipse tools. Or you can use the Pen tool to create any custom shape you want. Text placed on these shapes can be static, or by assigning it as a Crawl you can animate the text to move along the shape you create.

Path Text involves following these simple steps:

- Create a shape
- Convert it to a path
- Use the text tool to add text to the path
- Assign the text as a crawl and position or animate the letters

Create a Shape for your text

Using the Ellipse, Rectangle or Pen tool draw a shape upon which you wish to place your text. The shape can be edited with the pen tool either before you turn it into a Path, or it can even be edited after you have converted it to a Path and placed your text on it!

Convert your shape to a Path.

This is simple:

- Select your shape and choose OBJECT > CONVERT PATH TO SHAPE.

The object disappears, and you are left with an outline – the path of the original object.

Add Text to your Path

- With the path selected, chose the Text tool. A text cursor appears on the path and you may begin typing.
- Without the path selected, place the text tool over the shape until you see the Path Text cursor, and click on the shape

To control the position of your text on the path, you need to make it a Crawl and then adjust the Scroll position, as described next.

Assign the text as a crawl

To position your letters or animate them along the path you need to make them a crawl. In this case they will not crawl across the screen as they typically do, but will slide along the path you have placed them on.

- With the text tool, right click on the letters and choose MOTION > CRAWL.

Adjust position of the text on the path

- Chose Left, Centre, Right or Full justification to position your text at these positions along your path.

We may also use the Scroll position to adjust the position of the letters on the path.

- Begin by deselecting the path text.
- Choose the Text tool from the Toolbox
- Adjust the scroll control which will become visible n the Monitor window

Reverse Motion and Position

With the Pen tool, select the path upon which the text has been placed. When the path is visible with all its nodes (boxes) present, right click on the path and choose REVERSE. The font will flip to the other side of the path, and will reverse its direction. Compare this image to the original at the start of this section.



Here are some other tips for Path text:

- Text on a path may be changed (edited) in the normal way.
- Paths may be edited at any time using the Pen tool techniques we looked at earlier.
- You can only move the text path UP or DOWN on the screen. To move it Left or Right, hold SHIFT as you drag.
- Adjust the Baseline of the text in the Path Property Viewer
- Adjust the letters to Follow or appear Upright in the Path Property Viewer

EXERCISE 11

- Create a ROLL. Adjust its duration. Output it to the AVID
- Create a CRAWL. Adjust its duration. Output it to the AVID
- Draw a shape over an image, convert it to a Path, and place text on this path.
- Using the DVE with the earth texture from the last lesson, draw a circle around the earth, convert it to a path, type text on it then lay it down so the text appears to encircle the earth. Your instructor may need to help you with this one!

Module 12. Animation

Introduction

Now that we are confident we can create objects, we will explore how to move them around. This is done by creating keyframes, and allowing Marquee to change values between keyframes.

Normally, if we change a value in Marquee the change affects the whole title. In contrast to this, a keyframe stores property values only at a certain point in time. With two keyframes, Marquee will smoothly change property values from the first keyframe's value to the second keyframe's value. This is how we create animation.

There are two interfaces for creating Animation. Animation Mode and the Timeline.

The Animation Mode is activated by pressing the Animation button in the Toolbox (shortcut **A**). In this mode, you simply move things around the frame, and scroll through time, and Marquee creates keyframes and therefore your animation without you needing to even see the timeline. This approach is suitable for simple animations, or for creating the first rough of a more complex animation. ***This is the only practical method for creating animation in Marquee!***

For more control you may want to know about the Animation Timeline and how to work with it. The timeline window will allow you to see your keyframes on a traditional timeline. You can move them, change their values, delete them and create new ones.

The Timeline interface is very limited however, and you are advised not to plan to use it as frequently as you use the other Avid timelines. It is suitable for finding, moving and deleting keyframes only. Since you can't copy and paste keyframes (!) the interface is actually of little value beyond this. Your instructor will probably skip the discussion of using the Timeline, although it is covered here in the text.

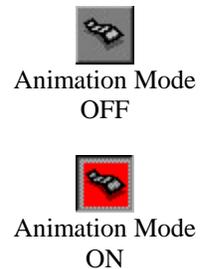
Animation Mode

ANIMATION mode allows keyframing, a concept you may be familiar with from your AVID and After Effects experience.

Marquee sometimes makes keyframes when you move things, and sometimes not. How do we decide if we want Marquee to create keyframes or not ?

This is determined by whether the ANIMATION button is activated (in which case it is RED) or not. The animation button OFF indicates the changes you are making are global (for the entire animation). The animation button ON indicates the change is for that position in the timeline only, and if there is not already a keyframe there, one will be made for you.

- Activate full toolbar VIEW > TOOLBOX > FULL
- Click on ANIMATION MODE button or press A It toggles between RED (animation mode ON) and Gray (animation mode OFF)



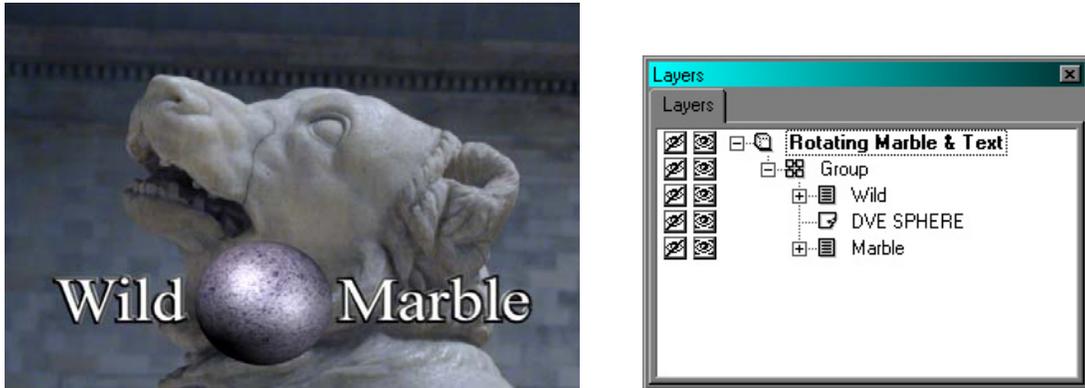
Without opening the timeline it is possible to program simple animations. You simply turn on the animation button, scrub to different positions in the timeline and make your changes directly to the objects in either the Monitor Window or the Property Windows.

While this technique is fast and intuitive, it is difficult to make changes and determine exactly what is happening as you don't see a timeline with keyframes. With these limitations in mind, here is how to animate this way:

- Your animation duration is set at 5 seconds by default. If you need more or less time, select FILE > PREFERENCES > CURRENT TITLE and change the duration value for your unseen timeline..
- The time display in the status bar (lower right of Monitor Window) can be 'scrubbed' to move forward and back through your currently invisible timeline. For slower, more precise motion hold CONTROL as you drag. For faster scrubbing, hold SHIFT as you drag.
- Scrub to an appropriate position in the animation, and use the monitor window controls (such as Edit arrow to move, Rotate tool to rotate), or use the TRANSFORM palette or indeed any Property Window to make changes at that position. Repeat for as many positions as necessary.
- With the Monitor Window highlighted, press the SPACEBAR to preview the result
- To make a global change (move the entire animation to a new position for example) turn the Animation Mode button OFF and make your change.

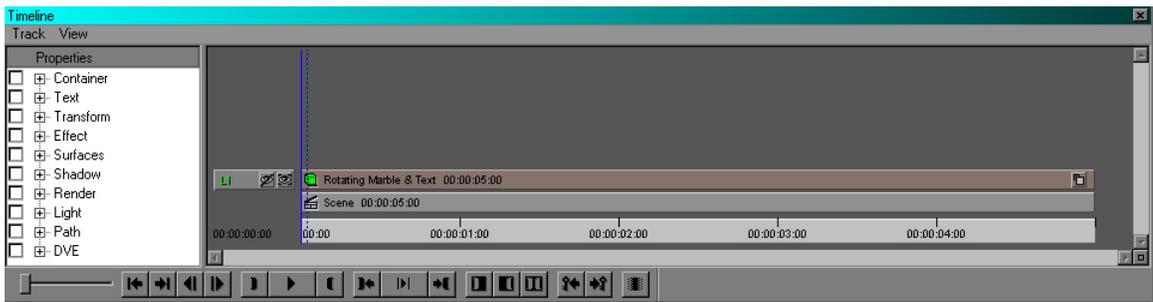
Timeline Animation

While the above procedure is OK for simply animations, or for roughing out a more complex move, we will need to see and work in our *timeline* for most animations.



As an example, we will be taking this “Wild Marble” title and rotating it around the Y axis. It is a single layer, consisting of a group of three objects: two pieces of text and a DVE Sphere.

We begin by opening the timeline by pressing CONTROL + T or selecting WINDOW > TIMELINE from the Menu's. Two toolsets are setup for animation as well, select the animation toolsets from the Toolset menu, or choose F4 or F5 to access them from the keyboard.

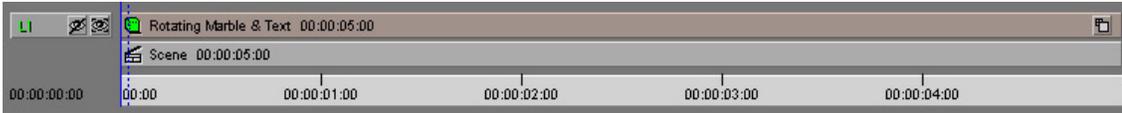


Initial Timeline for the Wild Marble Title

The timeline has three separate areas:

- Object Properties on the left
- Object Tracks on the right
- Transport Controls on the bottom

Invariably we begin on the right in the Object Tracks part of the display.



TIME TRACK Current Time at the left, time tape at the right. Click and drag here to position Play head

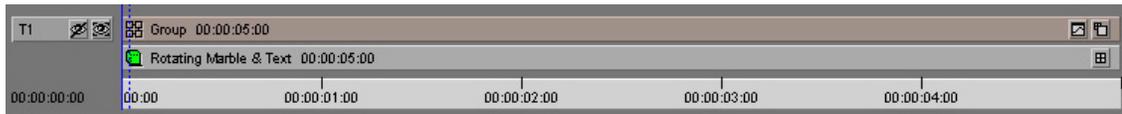
LAYER INDICATOR  Currently selected layer appears in Green

SOLO  Show only this layer (not selected)

MUTE  Hide this layer (not selected)

EXPAND  Show objects inside this container

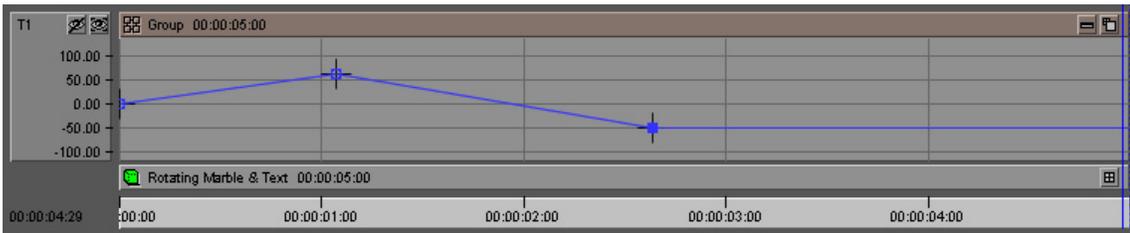
We know the layer L1 named “Rotating Marble & Text” contains three objects combined into a group. To see the group and animate all three objects together we need to step into the layer once.



EXPAND  Steps INTO the container to which it is attached

COLLAPSE  Steps OUT of the container to which it is attached.

To see the keyframes and animation curves we create, we need to Show Curves:



SHOW CURVES  Displays the Property Curves for the container to which it is attached. You may also drag the top of the layer UP to expand the track More than one track may be expanded or opened at a time

What You Can Animate

Any title may have multiple objects, and each object can have multiple parameters animated. Some programs, like After Effects, provide a separate track and graph for each animateable parameter. Marquee is different: it only ever shows one graph per object, and you tell it what parameter or parameters you wish to see in the one graph space. To see an animation graph:

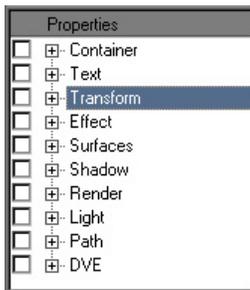
- Select the object
- Select the Parameter(s)

Selecting an Object

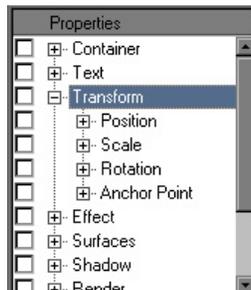
Use the Timeline's Layer Expand / Collapse  buttons to expose the track for the Object you wish to animate, then click its Show Curves button  to show the graph for that object. When navigating around the timeline layers, you may select layers and objects by:

- Click on the objects Layer in the Timeline
- Click on the object in the Monitor Window
- Click on an object in the Layers Palette

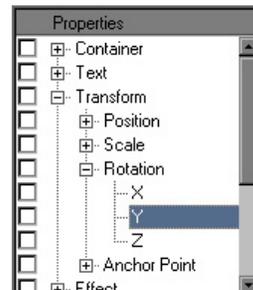
Selecting a Parameter



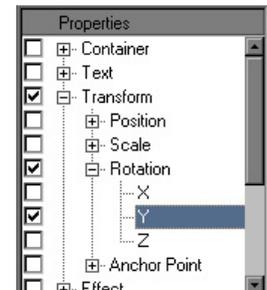
Properties with Transform category highlighted



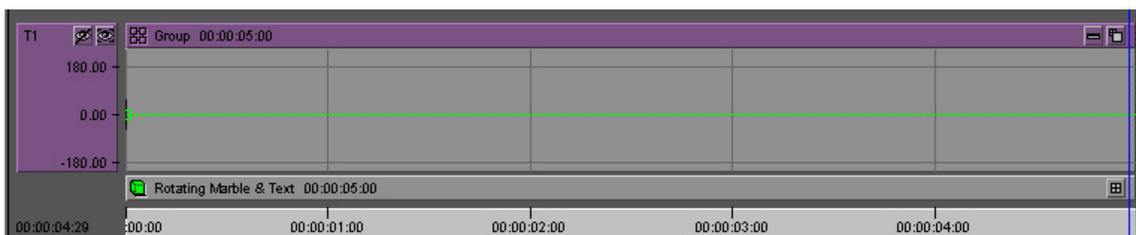
Click on + opener beside Transform to reveal what transforms can be animated



Click on + opener beside Rotation to see what can be animated

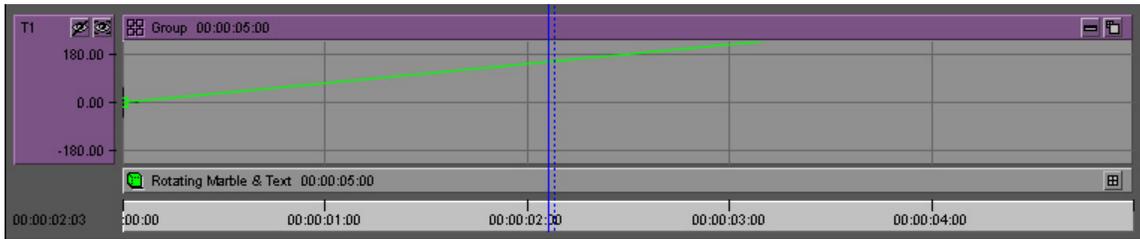


Place a check mark beside Y ROTATION to display its graph and any keyframes that might be present.



Graph area showing new curve for ROTATION

The graph above shows rotation, but notice the scale values only show from 0 to +180 and from 0 to -180 degrees. To do a full rotation, we need to see a full 360 degrees or our keyframes will be off scale:



Graph area showing final curve for ROTATION

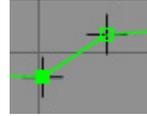
To control graph magnification, use these five tips, all which require the mouse cursor be within the timeline boundaries:

UP Arrow	Scroll UP graph to higher number
DOWN Arrow	Scroll down graph to lower number
SHIFT + UP ARROW	Increase graph scale
SHIFT + DOWN ARROW	Decrease graph scale
RIGHT CLICK ON GRAPH	Select RESET PAN / ZOOM to set graph back to normal

You may also increase the size of the graph window by dragging its top edge.

Working With Keyframes

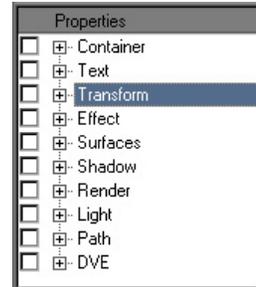
Keyframes appear as small boxes on the property graph line. A hollow box is a keyframe, a solid box is a selected keyframe. More than one keyframe may be selected, so that groups may be deleted, moved or modified together.



Create a Keyframe	<ul style="list-style-type: none">• By direct Manipulation- just park and change a parameter while in Animation Mode• ALT + CLICK on property line• Position mouse near property line and an UP arrow icon appears. Right click at this moment and select “Insert Key” to create a keyframe at the position of the Arrow. Notice it is not necessary to park where you want a new keyframe.
Select a Keyframe	<ul style="list-style-type: none">• Select One: Click on a keyframe• Select Multiple: SHIFT + CLICK on several keyframes• Select All: CONTROL + A or RIGHT + CLICK on graph and choose “Select All Keys” from the context menu
Toggle a Keyframe	CONTROL + CLICK to toggle keyframe selection ON and OFF
Deselect a Keyframe	Click in the graph but not on a keyframe
Delete Keyframe	Select the keyframe and press DELETE
Move a Keyframe	<ul style="list-style-type: none">• Position cursor over keyframe so an UP arrow icon appears, then drag in any direction• Drag keyframe vertical bar to move UP/DOWN only (change value). A double headed UP/DOWN icon appears as you drag• Drag keyframe horizontal bar to move LEFT/RIGHT (change position). A double headed L/R icon appears as you drag.• Hold SHIFT as you drag to move only along preset frame and interval values
Change Keyframe Value	<ul style="list-style-type: none">• Drag a Keyframe UP/Down• Drag the object in the Monitor Window• Change the value in a Property Window

Creating Multiple Keyframes

If you look closely at the Object Properties window, you will see that to record an objects position, you need to create three keyframes – X, Y and Z position. If you turn all three properties on at once, their graphs could potentially overlap in the Property graph and they could interfere with each other. To create keyframes, you could turn each of these properties ON one at a time, but that would be very difficult to manage.



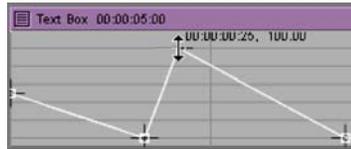
Instead, we have four special new Keyframe buttons at the bottom of the timeline which will make more than one keyframe at a time for our convenience:

Button	Name	Description
	Add X, Y, Z Position Keyframes	Adds keyframes to the X, Y, and Z Position property curves at the current location of the position indicator.
	Add X, Y, Z Rotation Keyframes	Adds keyframes to the X, Y, and Z Rotation property curves at the current location of the position indicator.
	Add X, Y, Z Scale Keyframes	Adds keyframes to the X, Y, and Z Scale property curves at the current location of the position indicator.
	Add RGB Main Color Keyframes	Adds keyframes to the R, G, and B Main Color property curves at the current location of the position indicator.

As a summary, here are the cursor functions in the timeline when working with keyframes:



UP ARROW means you can click to select – and move in ANY direction- there are no constraints



UP and DOWN arrow – move KF UP and DOWN only, change KF value



LEFT RIGHT – move KF left right to change keyframe position

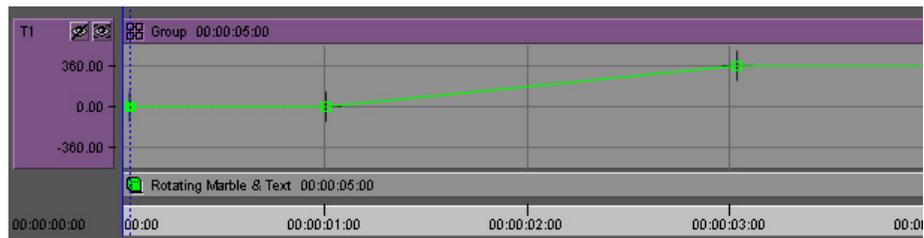


TRIM rollers appear at edge so you can change DURATION of object

Controlling Keyframe Velocity

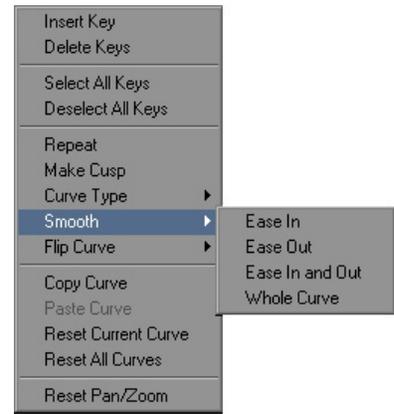
Keyframe Velocity (speed) is controlled in different ways in different programs. In the Media Composer, we have Acceleration and Spline. In After Effects we directly edit Velocity graphs in the timeline. Marquee is very much like After Effects in that we control speed of our move by keyframe position and keyframe velocity graph shape.

We create the initial rotation, and these keyframes indicate the move is a linear (and abrupt) rotation through 360 degrees.



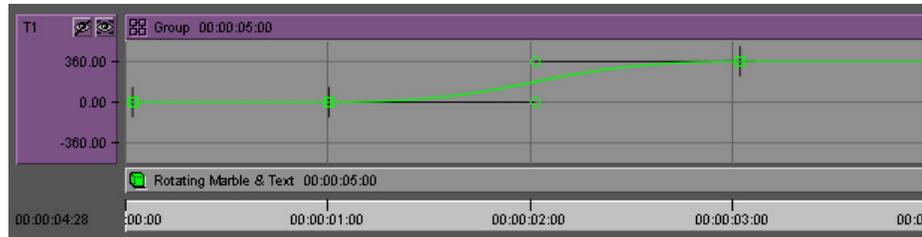
To create a smoother move, we can use the SMOOTH feature. Right Click on a line between two keyframes, and from the context menu select SMOOTH. You have four choices:

- EASE IN – Smooths left KF
- EASE OUT – Smooths right KF
- EASE IN AND OUT – Smooths both KF
- WHOLE CURVE – Smooths all keyframes in graph



Notice this EASE is the REVERSE logic of After Effects, where an EASE IN would create a handle on the left of a KF not on the right.

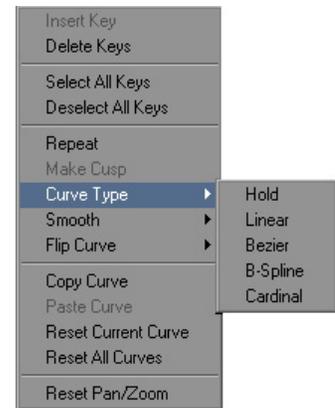
The resulting motion on screen is smoother, and the graph shows this. It also has two new 'handles' which can be manipulated to further fine tune the speed of the movement around these keyframes.



Once a keyframe has a handle, ALT + DRAG out of the keyframe to expose its hidden handle on the other side of the Keyframe.

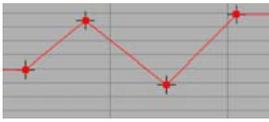
The Smooth feature is just a shortcut. Actually, it is assigning a curve type to more than one keyframe at a time as a convenience to you. There are five curve types, and you can also assign them manually.

To set a curve type, right click on a keyframe (or on the line to its right) and select the curve type from the context menu. Select more than one keyframe before doing this if you wish to assign a curve type to multiple keyframes.



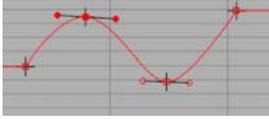
HOLD

Value jumps to new setting at each keyframe



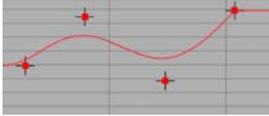
LINEAR

Value varies linearly between keyframes



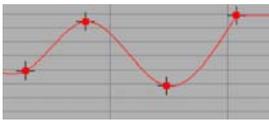
BEZIER

Value varies more smoothly. Curve passes through keyframe, has handles to be editable, values can change smoothly or drastically at each keyframe. Changes are limited in their effects on other keyframes.



B-SPLINE

Smooth movement by the program. No handles for editing, graph may not pass through keyframes (may not actually hit programmed positions) but changes are always gradual. Changes to one keyframe may effect many others.



CARDINAL

Smooth movement by the program, but path does pass through keyframes (will hit all pre-programmed positions). No handles for manual editing.

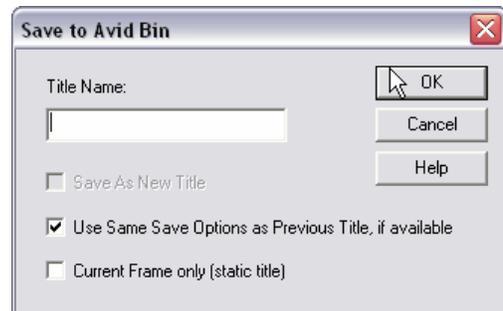
In many of the above cases, you may need to assign one of the settings to three adjacent keyframes so the middle one of the trio will display all the attributes of the curve type.

Animation Tips

To Save Rendering

If you have an animation which has a long hold at the top, some movement, and a long hold at the tail, we can speed up rendering by saving it as *three* objects into our bin. We can save a static title for the top, which we can edit to any duration we want. We can save the move only as a single animation. We can then save the last frame as a static frame and also edit it to any desired duration.

When you go to save your animation this box appears. Save the **FIRST** and **LAST** frame of your animation after setting a checkmark in the *current frame only* checkbox. Then remove this checkmark and save the moving animation as a fully rendered movie.



In the editing system, edit in a few seconds of the top static title, edit in the animation, edit in the last static title. While this sounds like a lot of work, it offers two significant advantages.

First, you reduce render time coming from Marquee.

Second, you can now trim the Top or Tail of your title without needing to do any re-rendering. The static titles on the beginning and the end offer us a buffer whose length we can change without needing to return to Marquee for a re-render!

Using MARKS on the Timeline

Once we are working in the timeline, we have access to a few familiar and a few new buttons. The familiar buttons are mark IN and Out, erase IN and OUT, Go To IN and OUT, PLAY, PLAY IN to OUT, GTO HEAD, GOTO TAIL. You can see them all below.

Why mark IN and OUT points on the timeline ? There are two reasons we will discuss here:

- To designate the parts of the timeline a SCRIPT is to operate on
- To designate what part of a property to fade UP and DOWN on.

DeleteKeys and MoveKeys

The Script library contains two scripts which operate on the timeline. DeleteKeys and MoveKeys. Both do what you would expect on a group of keyframes indicated by the current marks in the timeline. Delete Keys will find all keyframes on any property within the timeline and delete them. You don't need to hunt down keyframes in a range manually. Similarly, MoveKeys will present a dialogue where you can enter the distance you wish to move all keyframes in a range.

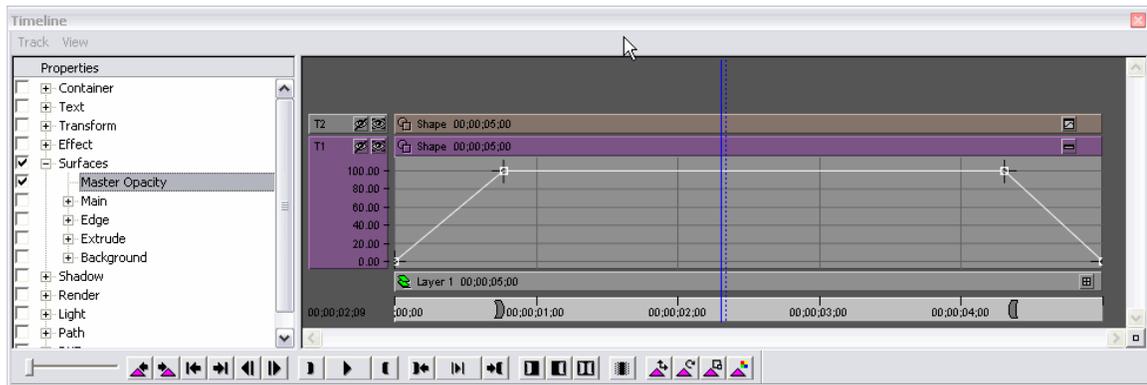
Simply place your marks around the appropriate range in the timeline, and double click on the scripts name in the library window to run it.

QuickFade

From the timeline, you can quickly fade objects IN, OUT or both IN and OUT.

- Begin by placing marks to indicate the art of the timeline you wish an object to be visible for.
- Click QuickFade . A fade IN begins at the start of the objects property Graph, and ends at the Mark IN. A fade OUT begins at

the mark OUT and ends at the end of the Objects Property graph, as shown below.



You don't need to select properties or do any other preparatory work. The QuickFade button places keyframes and adjusts the Master Opacity on the object.

Keyboard Shortcuts

FONT

ENLARGE SELECTED FONT	CTRL + SHIFT + >
REDUCE SELECTED FONT	CTRO + SHIFT + <
INCREASE LEADING	ALT + UP ARROW
REDUCE LEADING	ALT + DOWN ARROW
INCREASE PARAGRAPH SPACING	ALT + SHIFT + DOWN ARROW
REDUCE PARAGRAPH SPACING	ALT + SHIFT + UP ARROW
INCREASE KERNING	ALT + RIGHT ARROW
REDUCE KERNING	ALT + LEFT ARROW

When typing, the ENTER key creates a line break of the type you might use to separate names in a list.
When typing SHIFT + ENTER creates a paragraph break, which usually has greater spacing than a line break.

ADJUSTING BEZIER HANDLES

EXTEND HIDDEN HANDLE	ALT + DRAG out of keyframe
UNLOCK HANDLE PAIR	ALT + DRAG a handle
LOCK HANDLE PAIR	CONTROL + CLICK a handle
CHANGE HANDLE LENGTH ONLY	SHIFT + DRAG the handle
SHRINK HANDLE TO 0	RIGHT + CLICK on keyframe and select MAKE CUSP

ANIMATION SHORTCUTS

HOME	Go to start of timeline
END	Go to end of timeline
SPACEBAR	Play timeline
[Go to previous keyframe
]	Go to next keyframe
UP Arrow	Scroll up property graph
DOWN Arrow	Scroll down property graph
SHIFT + UP ARROW	Increase magnification of graph scale
SHIFT + DOWN ARROW	Decrease Magnification of Graph scale
Right Click	and select RESET PAN / ZOOM

MISCELLANEOUS

ARROW Keys	nudge selected object
CONTROL =	Zoom IN
CONTROL -	Zoom OUT
CONTROL A	Select All
Single click in a number field	to position cursor
Double click on a number field	to select current entry so your typing will replace it.
CONTROL + \	(in Monitor Window) to Preview your work