

Television Production I
Inscriber Character Generator

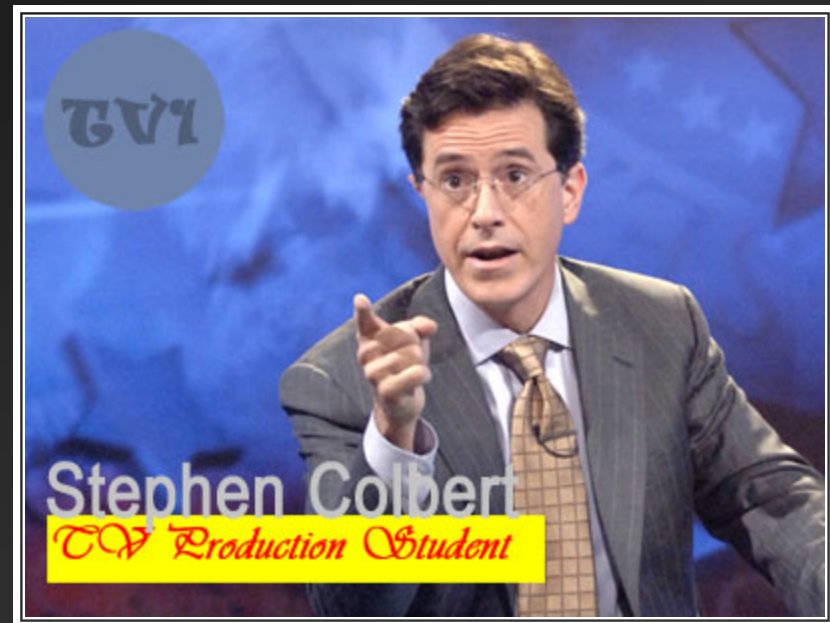
Presented by
Diana Nicolae

Graphics Basics

- Goal of graphic design – information displayed on-screen should be easy to read and pleasing to the eye

Lack of contrast
over background

High energy color
background; font
too hard to read



e.g. Not This

Graphics Basics

- Think about placement
 - Rule of thirds still applies
 - Make sure it is in the “title safe area” of the screen

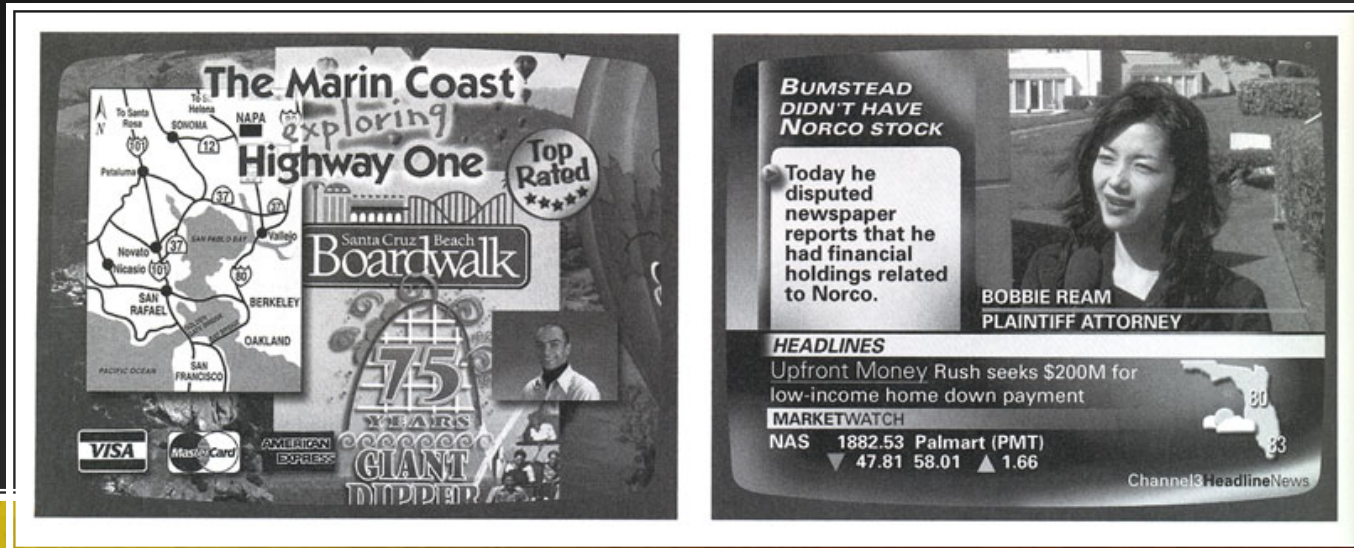


Graphics Basics

- Keep it simple - TV is lower in resolution than computer monitors
 - Choose fonts that have a bold, clean contour
 - e.g. **Sample Text** not *Sample Text*
 - Make sure the font is large enough to be easily read
 - e.g. **Sample Text** not Sample Text
 - Limit font choice to 1 or 2; more than that creates confusion
 - e.g. **Sample Text** & *Sample Text* & **Sample Text**

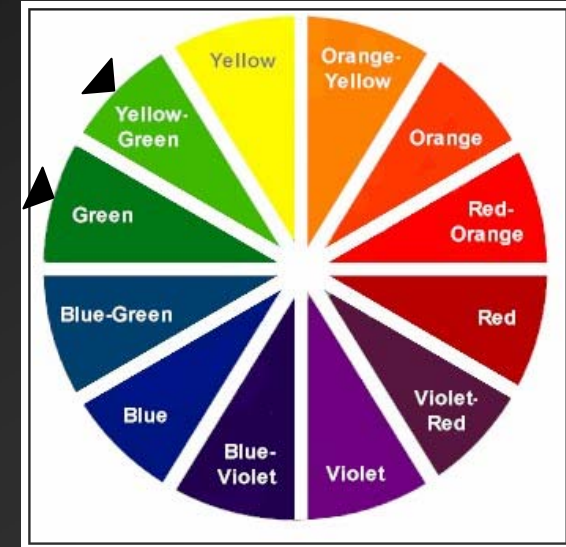
Graphics Basics

- Keep it simple - only a limited amount of information can be conveyed – too many elements can be confusing
 - If you have to convey a lot of information, use a defined structure or grid to plan (like the picture on the right)
 - Don't key lettering into too busy of a background



Graphics Basics

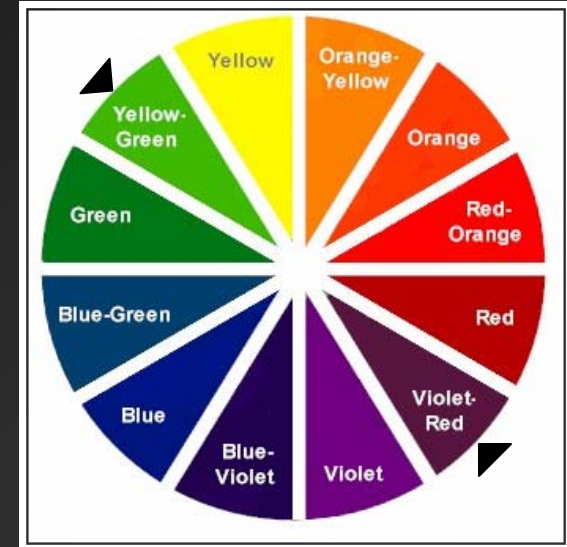
- Pick appropriate colors and contrast
 - Use colors that look good next to each other, and that have contrast for legibility
 - Adjacent/harmonizing colors
 - Adjacent on color wheel
 - Work well together but not enough contrast for textual information



Text Title

Graphics Basics

- Pick appropriate colors and contrast
 - Use colors that look good next to each other, and that have contrast for legibility
 - Adjacent/harmonizing colors
 - Adjacent on color wheel
 - Work well together but not enough contrast for textual information
 - Contrasting/clashing colors
 - Opposites on the color wheel.
 - Great contrast and high visibility
 - Not necessarily aesthetic though





Text Title

Graphics Basics

- Pick appropriate colors and contrast
 - Don't over-saturate the colors
 - Highly saturated colors (e.g. **THIS** or **THIS**) have more energy than low saturation colors (e.g. **THIS** or **THIS**)

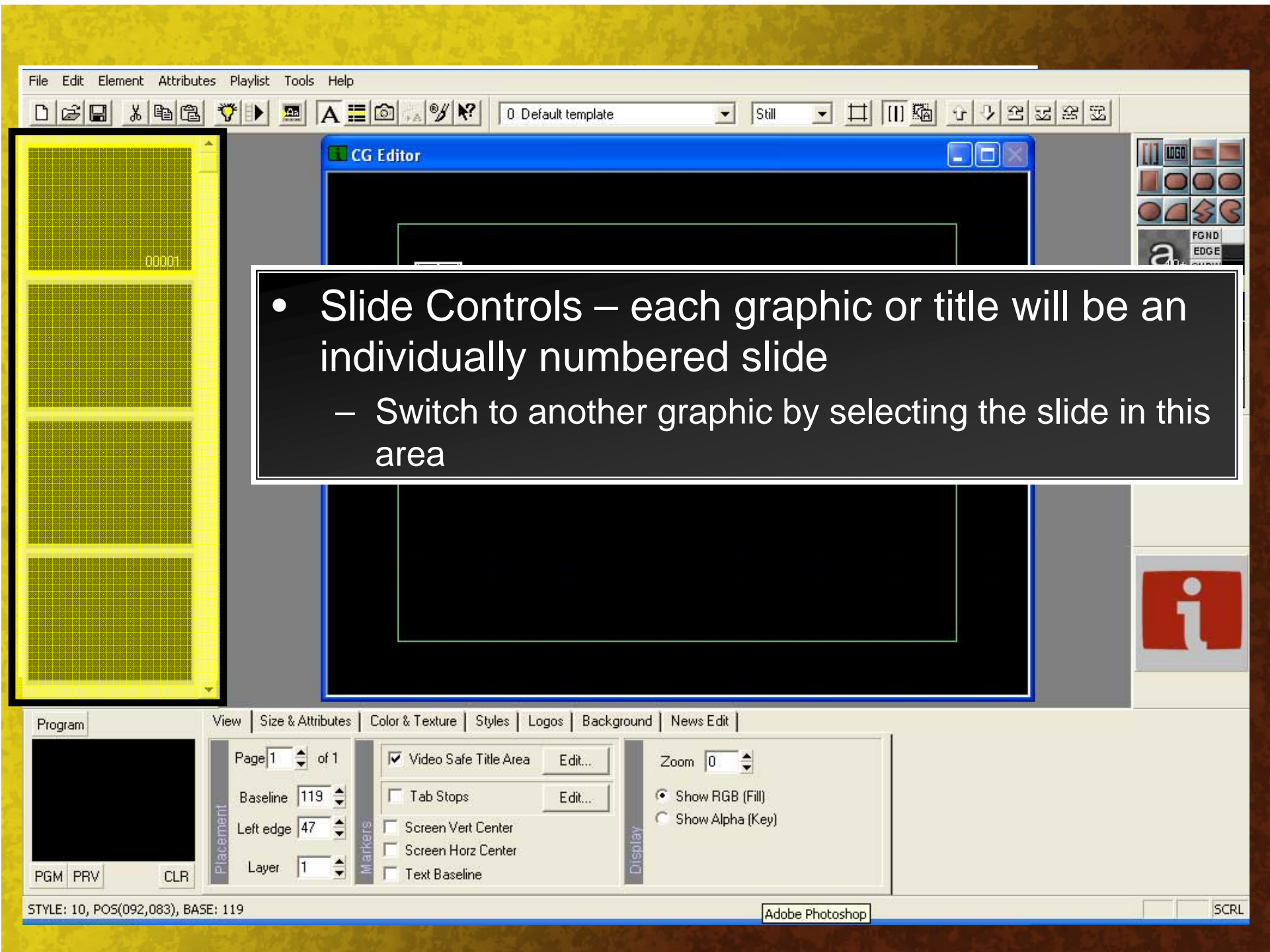


Graphics Basics

- Pick appropriate colors and contrast
 - Video is not capable of reproducing pure black or pure white
 - Avoid putting these two colors next to other on screen
 - The colors in the background should be less colorful than the foreground
 - e.g.  not 
 - An easily readable title has high-energy lettering on a low-energy background
 - Stay away from saturated reds (which tend to bleed into other colors on video); saturated colors in general can cause problems on video monitors

Character Generator Overview

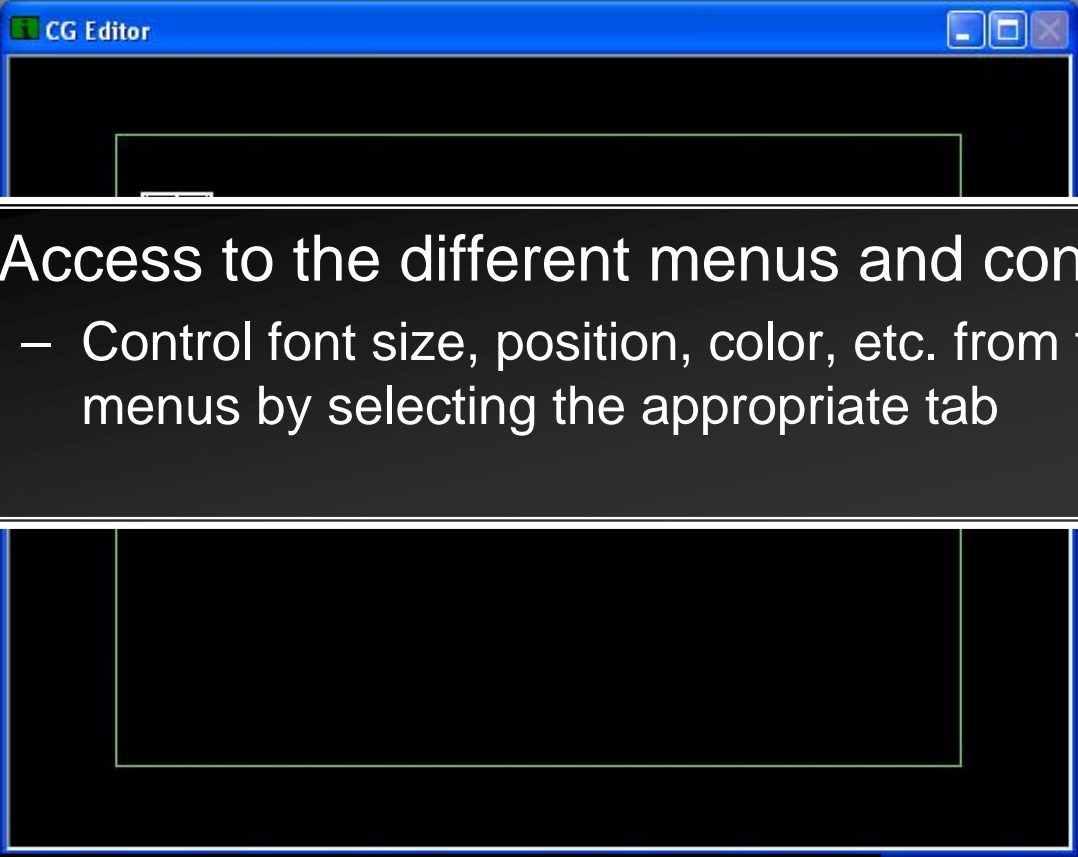
- There are a lot of capabilities in the studio to create clear and compelling titles and graphics
 - There are no excuses for having poor graphics
 - Be original - Do not re-use past classes or template files
- But the Inscriber CG program is not that simple
 - It takes practice and preparation to create good graphics
 - Learn the program, study the manual, and create your graphics well in advance



- Slide Controls – each graphic or title will be an individually numbered slide
 - Switch to another graphic by selecting the slide in this area

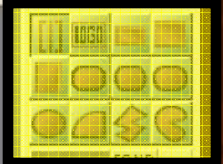
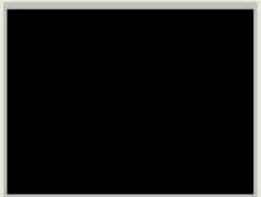


- Access to the different menus and controls
 - Control font size, position, color, etc. from these menus by selecting the appropriate tab

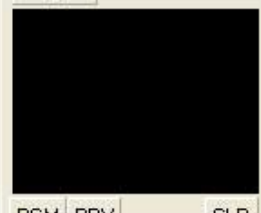


View | Size & Attributes | Color & Texture | Styles | Logos | Background | News Edit |

Page 1 of 1	<input checked="" type="checkbox"/> Video Safe Title Area Edit...	Zoom 0
Baseline 119	<input type="checkbox"/> Tab Stops Edit...	<input checked="" type="radio"/> Show RGB (Fill)
Left edge 47	<input type="checkbox"/> Screen Vert Center	<input type="radio"/> Show Alpha (Key)
Layer 1	<input type="checkbox"/> Screen Horz Center	
	<input type="checkbox"/> Text Baseline	



- Shape and Text Creation Tools
 - Create new rectangles, logos, text
 - Also use to re-select existing elements



Page 1 of 1

Baseline 119

Left edge 47

Layer 1

Video Safe Title Area Edit...

Tab Stops Edit...

Screen Vert Center

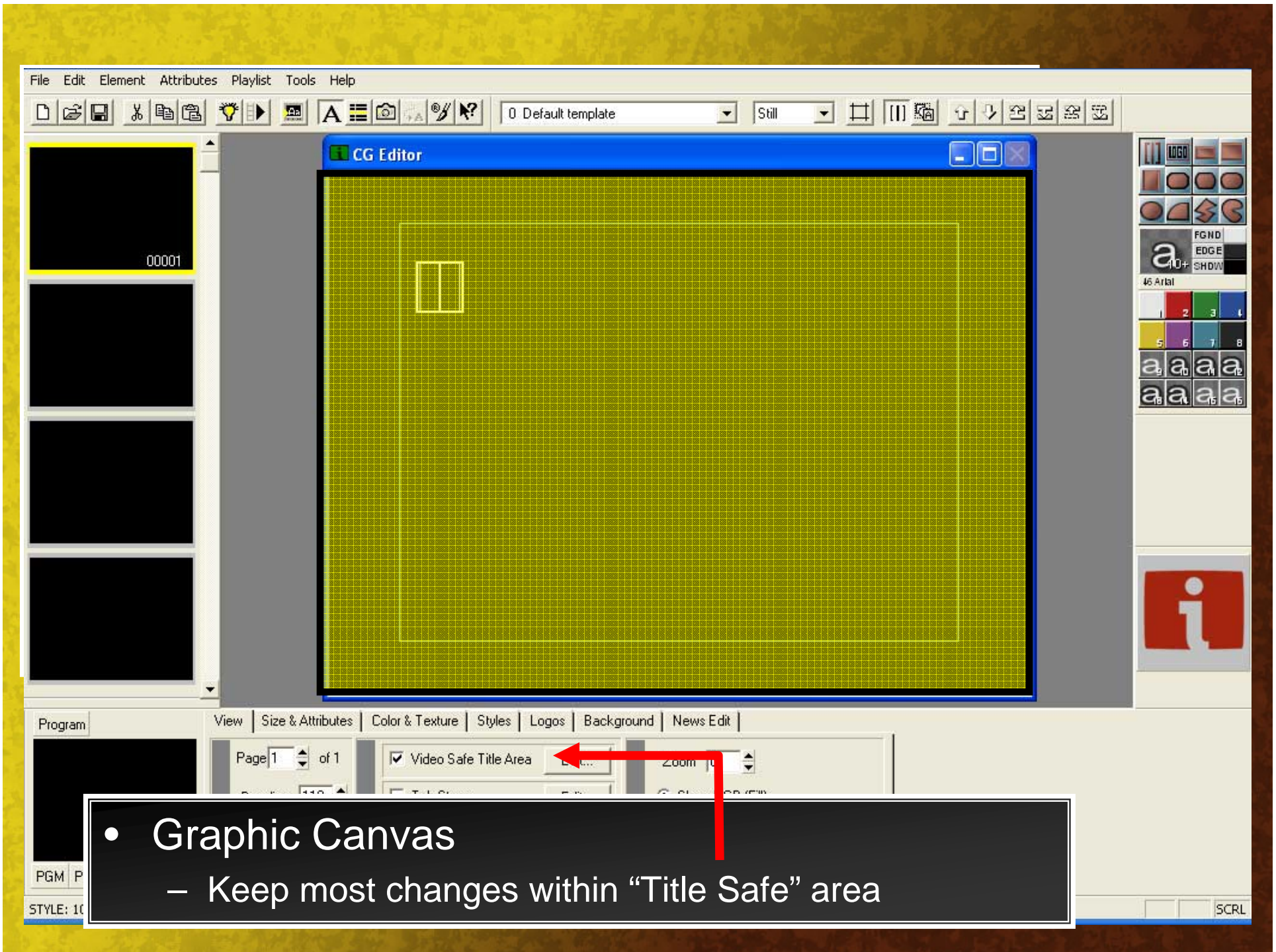
Screen Horz Center

Text Baseline

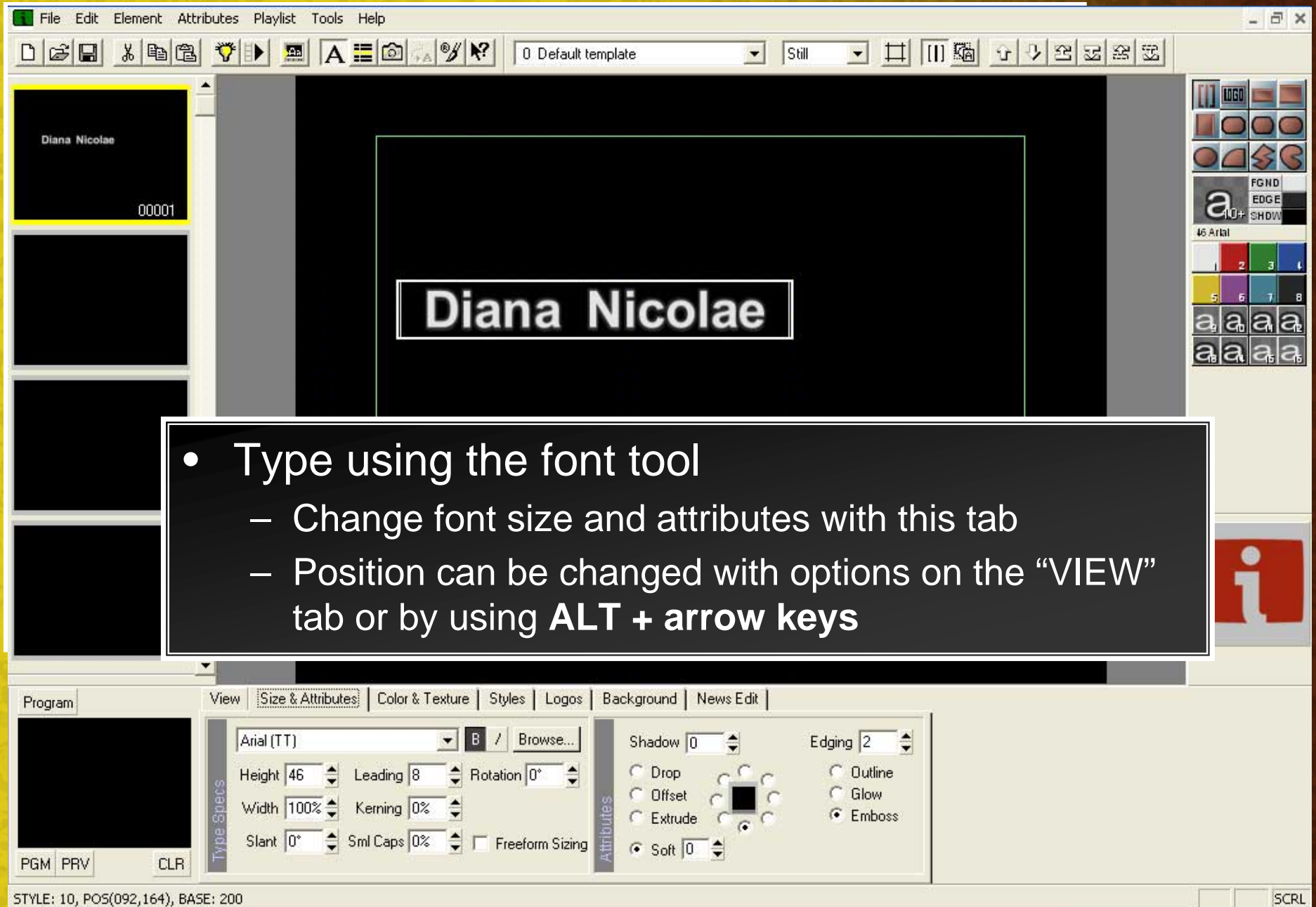
Zoom 0

Show RGB (Fill)

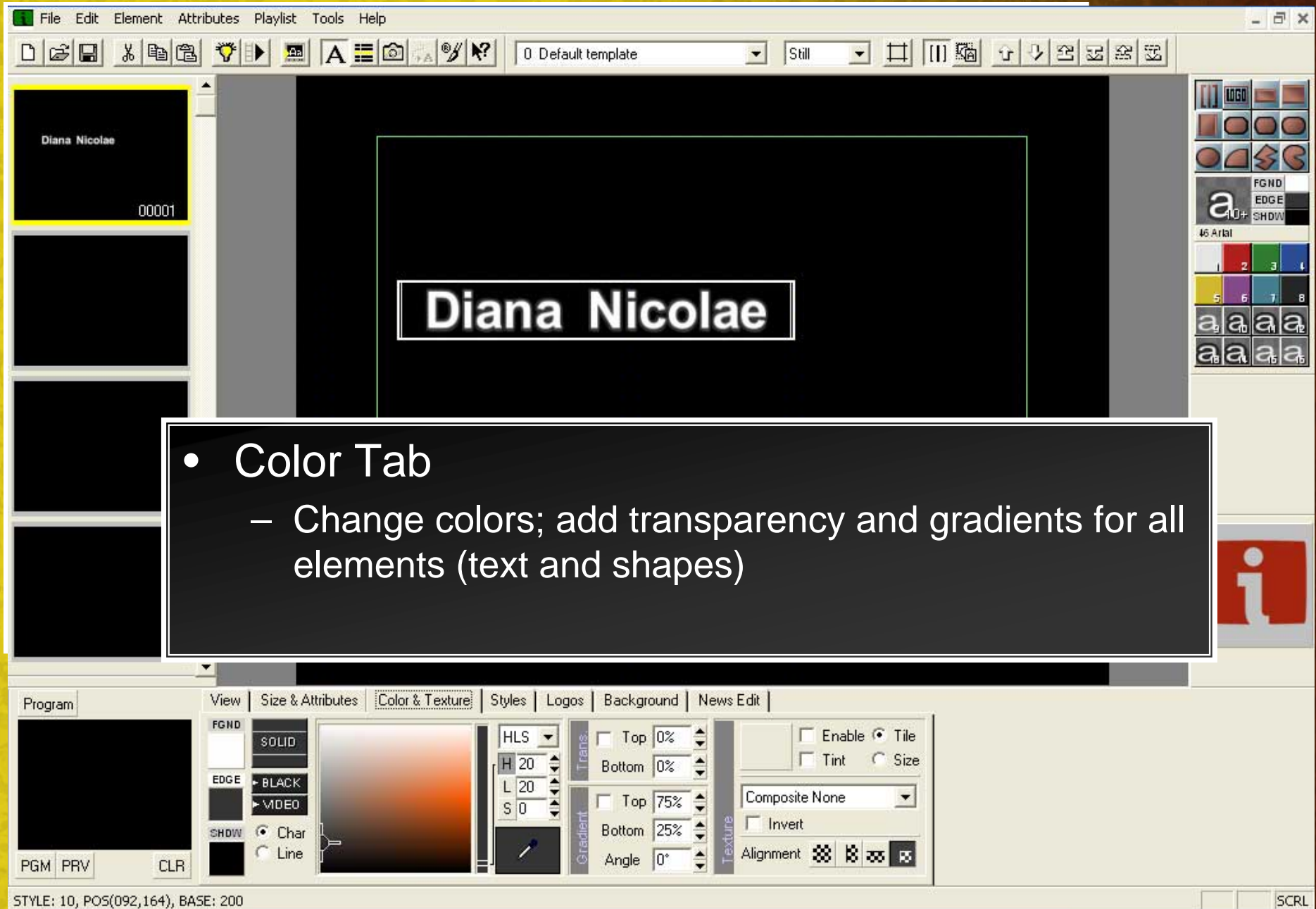
Show Alpha (Key)

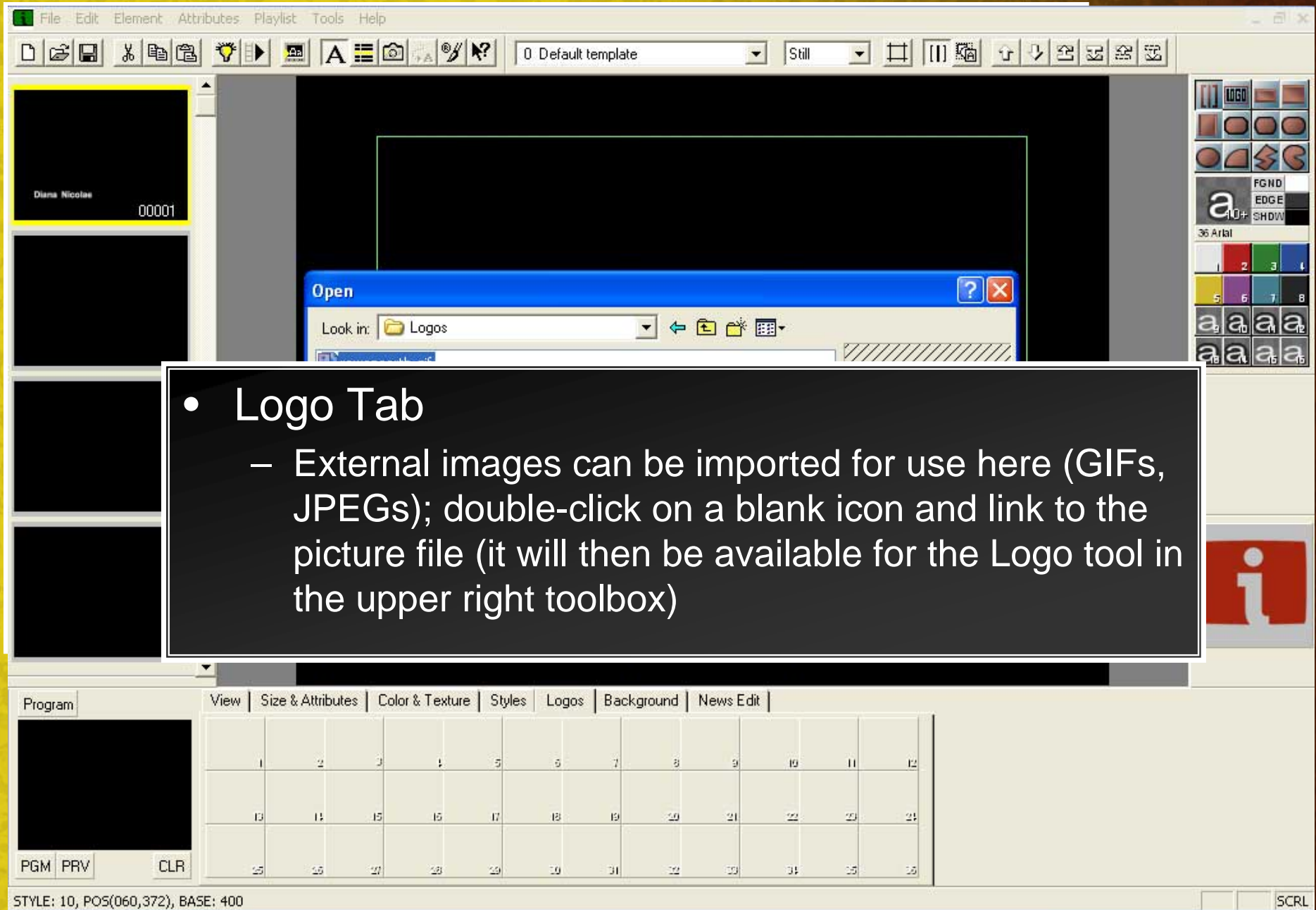


- Graphic Canvas
 - Keep most changes within “Title Safe” area



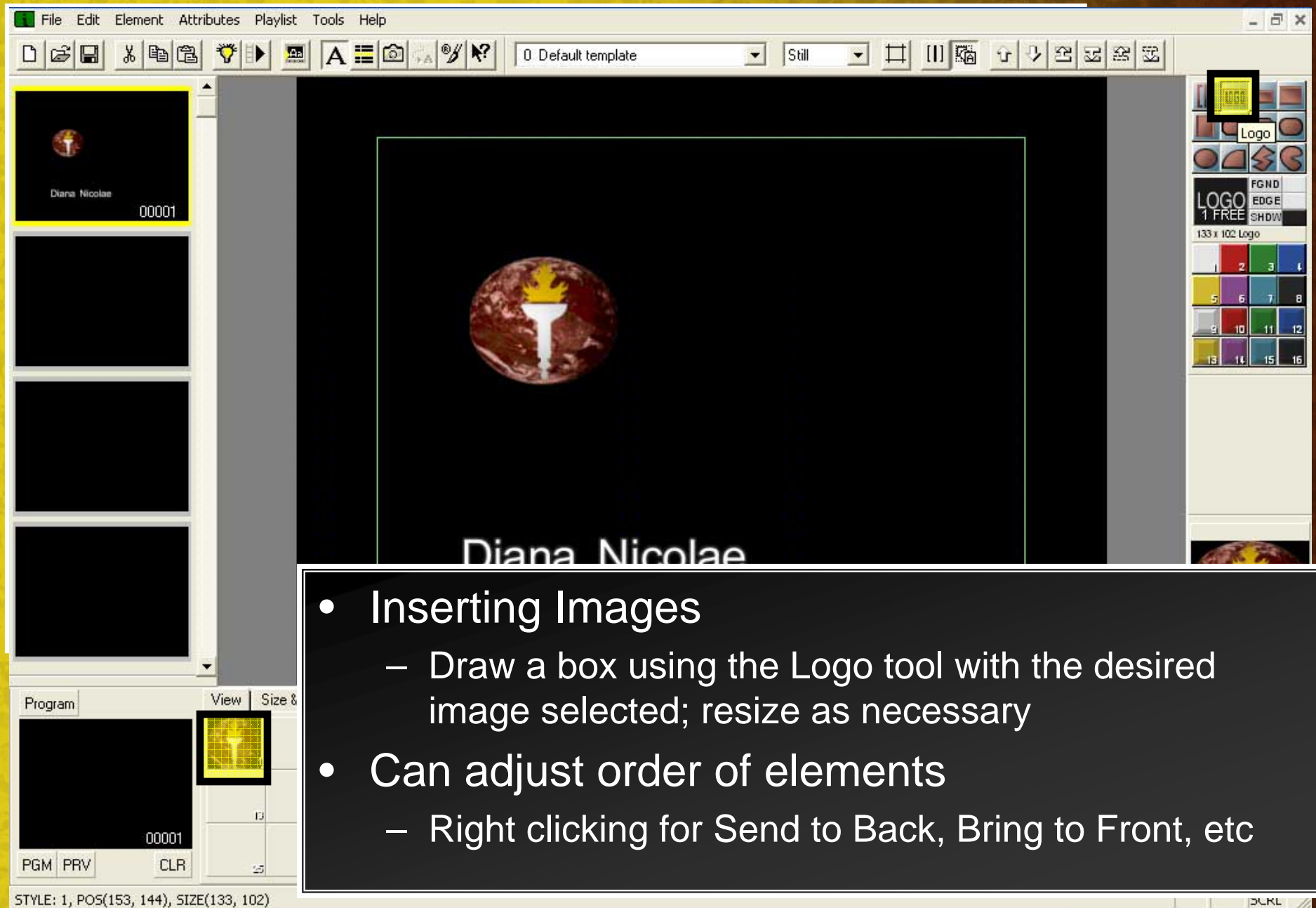
- Type using the font tool
 - Change font size and attributes with this tab
 - Position can be changed with options on the “VIEW” tab or by using **ALT + arrow keys**



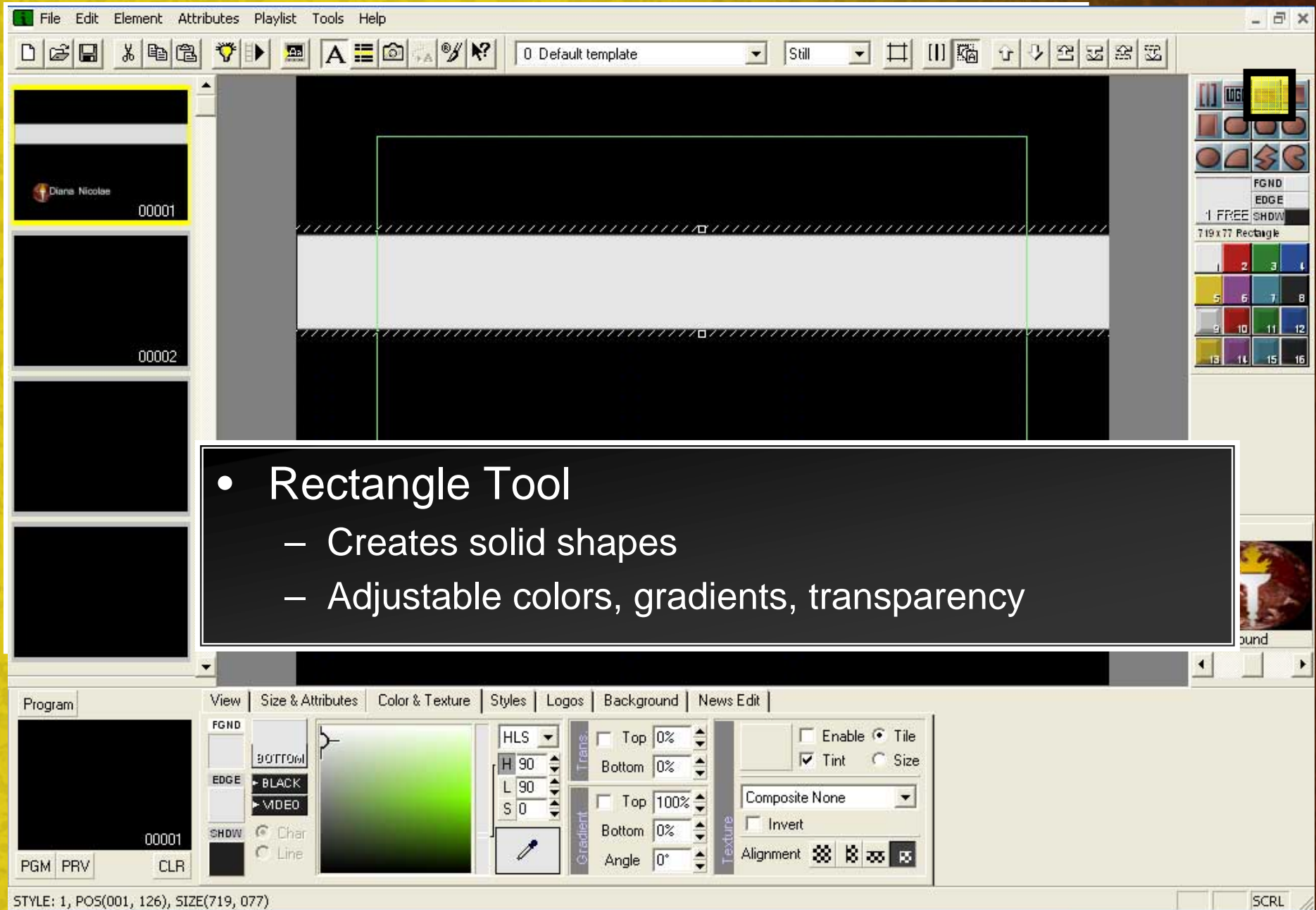


- Logo Tab

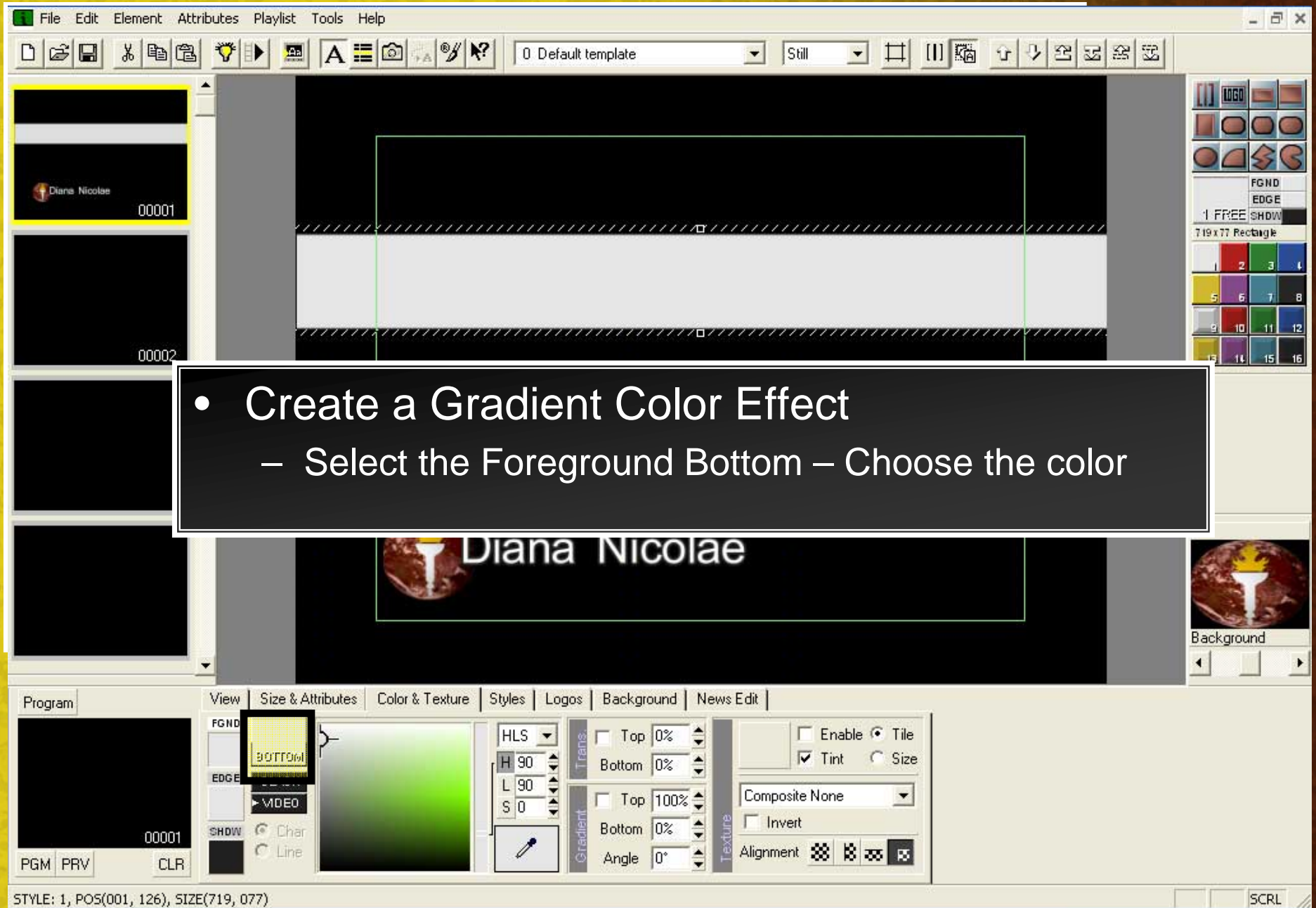
- External images can be imported for use here (GIFs, JPEGs); double-click on a blank icon and link to the picture file (it will then be available for the Logo tool in the upper right toolbox)



- Inserting Images
 - Draw a box using the Logo tool with the desired image selected; resize as necessary
- Can adjust order of elements
 - Right clicking for Send to Back, Bring to Front, etc

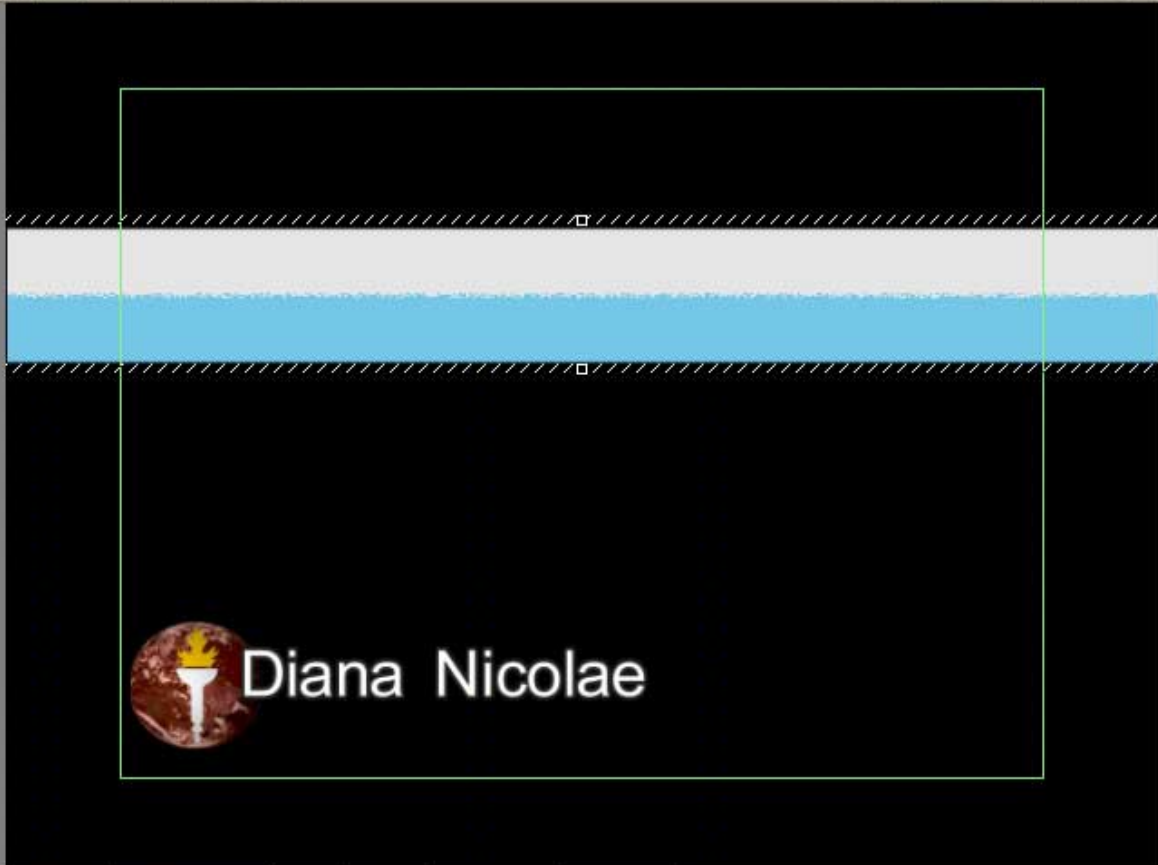


- Rectangle Tool
 - Creates solid shapes
 - Adjustable colors, gradients, transparency



File Edit Element Attributes Playlist Tools Help

0 Default template Still



LOGO

FGND
EDGE
1 FREE SHDW

719x77 Rectangle



Background

Program View Size & Attributes Color & Texture Styles Logos Background News Edit

FGND

EDGE BLACK VIDEO

SHDW Char Line

00001

PGM PRV CLR

HLS

H 197 L 68 S 71

Trans

Top 0% Bottom 0%

Gradient

Top 50% Bottom 50% Angle 0°

Texture

Enable Tile Tint Size

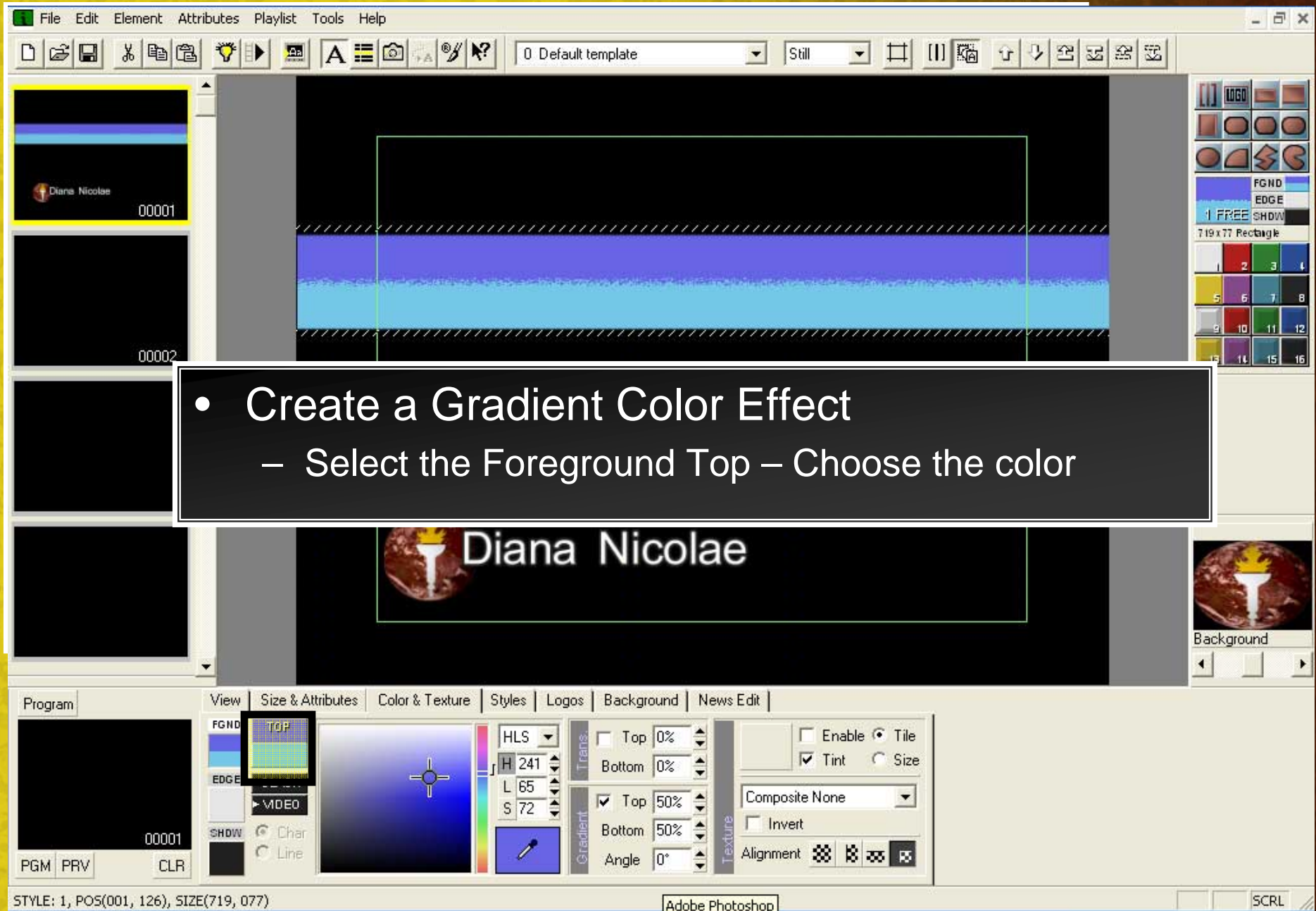
Composite None

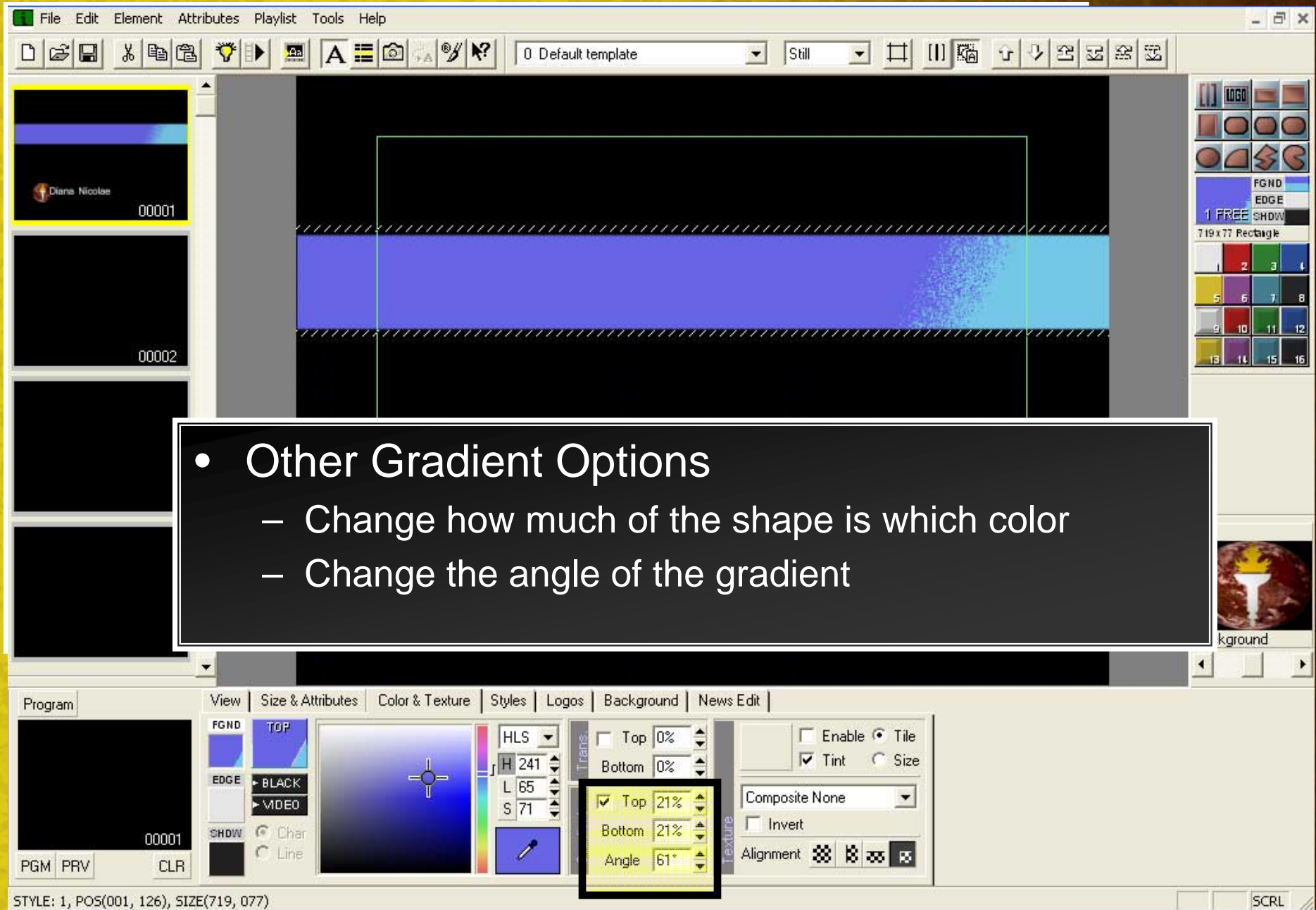
Invert

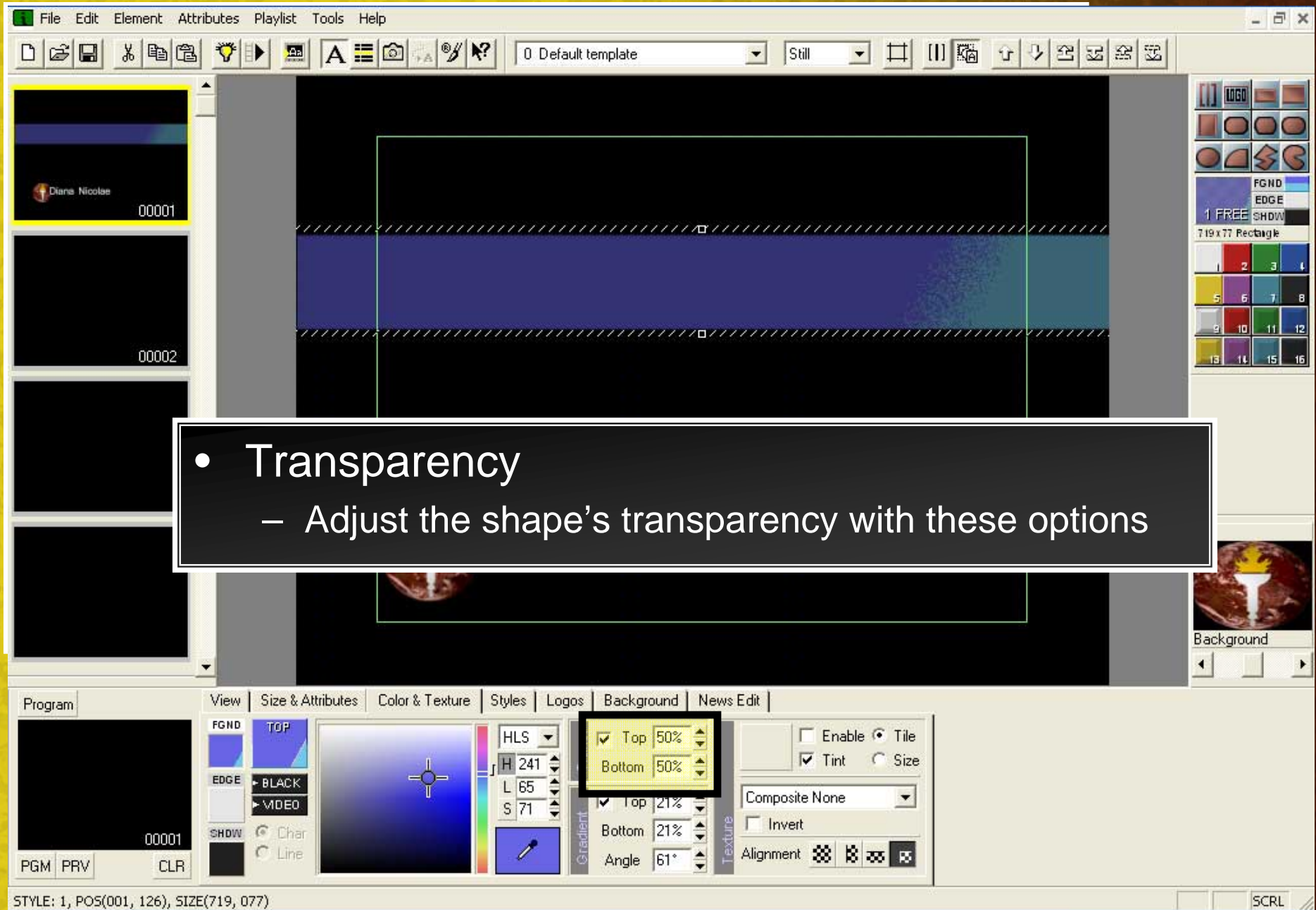
Alignment

STYLE: 1, POS(001, 126), SIZE(719, 077)

SCRL







- Transparency
 - Adjust the shape's transparency with these options

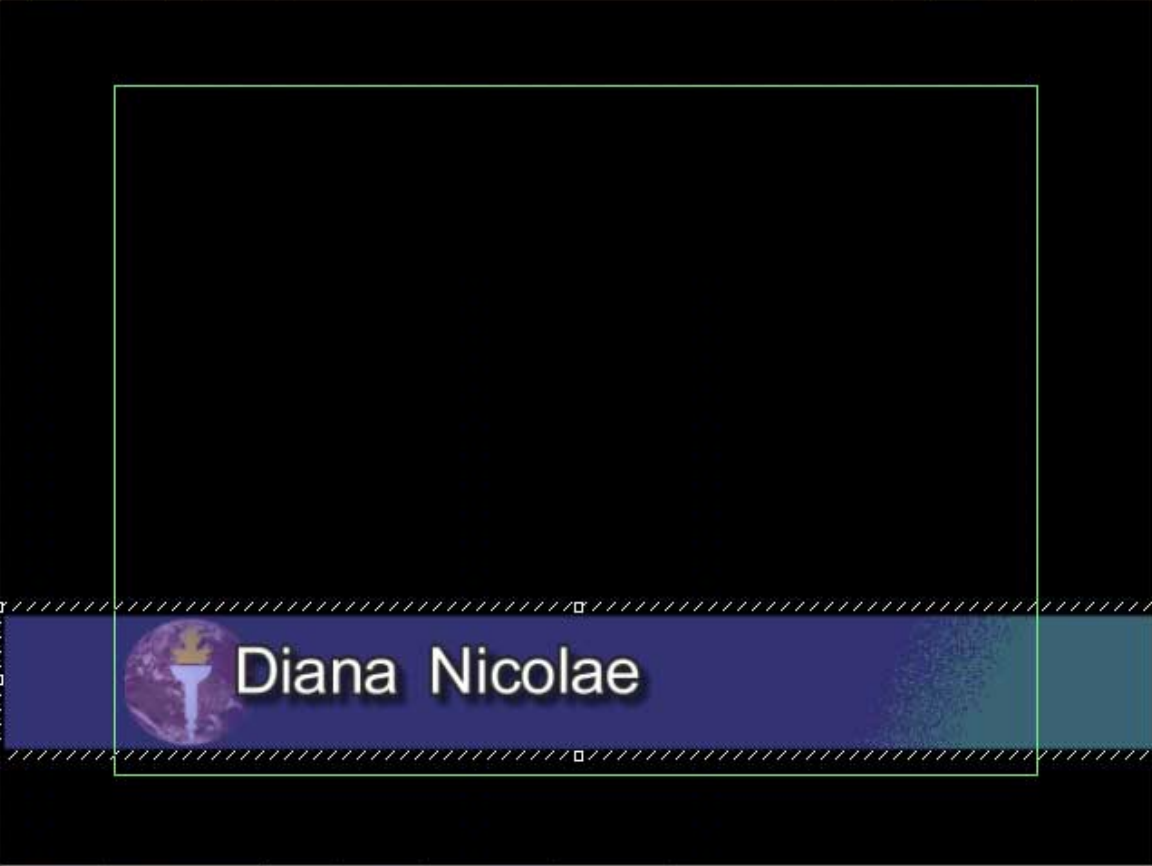
File Edit Element Attributes Playlist Tools Help

0 Default template Still

00001 Diana Nicolae

00002

00001



LOGO

FGND

EDGE

1 FREE SHDW

719x77 Rectangle

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16



Background

Program View Size & Attributes Color & Texture Styles Logos Background News Edit

00001

PGM PRV CLR

FGND TOP

EDGE BLACK VIDEO

SHDW Char Line



HLS

H 241

L 65

S 71

Trans

Top 50%

Bottom 50%

Top 21%

Bottom 21%

Angle 61°

Texture

Enable Tile

Tint Size

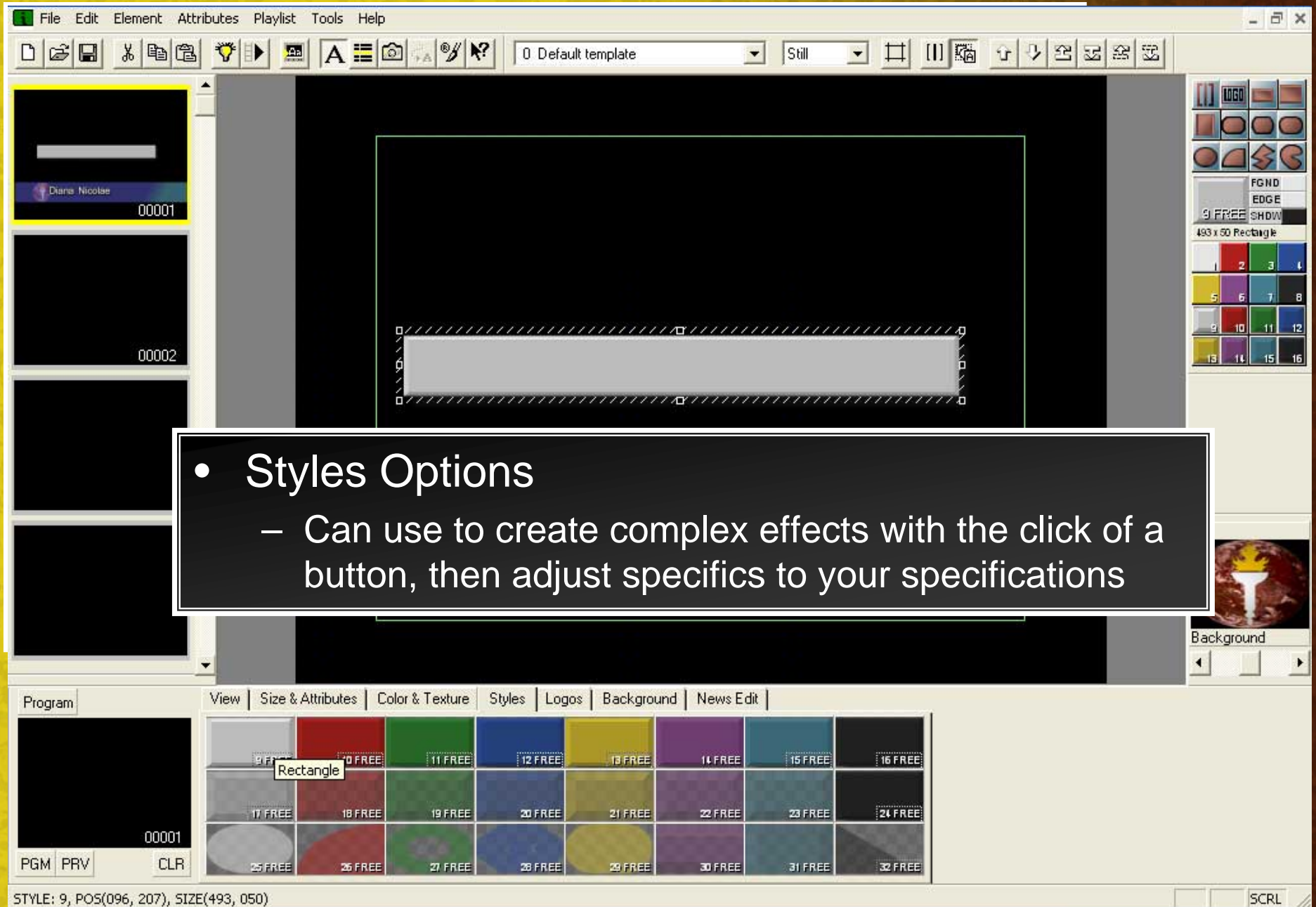
Composite None

Invert

Alignment

STYLE: 1, POS(003, 345), SIZE(719, 077)

SCRL



- Styles Options
 - Can use to create complex effects with the click of a button, then adjust specifics to your specifications

The screenshot shows a video editing software interface. At the top, there is a menu bar with 'File', 'Edit', 'Element', 'Attributes', 'Playlist', 'Tools', and 'Help'. Below the menu is a toolbar with various icons for editing, including a text tool. The main workspace is a dark area where a video frame is being edited. A blue horizontal bar with a globe icon and the text 'Diana Nicolae' is visible. A white text box with a black border is overlaid on the center of the frame, containing a list of instructions. The right side of the interface has a panel with various icons and a 'Background' section showing a globe image. The bottom of the interface has a 'Program' monitor and a 'View' panel with tabs for 'View', 'Size & Attributes', 'Color & Texture', 'Styles', 'Logos', 'Background', and 'News Edit'. The 'Color & Texture' tab is active, showing a color gradient and various settings like 'HLS', 'H', 'L', 'S', 'Gradient', 'Trans', and 'Texture'. The status bar at the bottom left shows 'STYLE: 10, POS(124,406), BASE: 442' and the bottom right has a 'SCRL' button.

- Create a second line of text
 - Go to the end of the existing text and press Enter
 - This new line of text will be independent of first line; can change size, color, position, etc.

The image shows a screenshot of a video authoring software interface. The main window displays a slide with a blue background and a globe icon. The text on the slide reads "Diana Nicolae" and "Rowan University | Glassboro, NJ". The interface includes a menu bar (File, Edit, Element, Attributes, Playlist, Tools, Help), a toolbar with various icons, and a sidebar with a slide thumbnail labeled "Diana Nicolae 00001". A text overlay in the center of the screen provides instructions on how to copy and reuse slide elements.

- Copy the Slide for re-using elements
 - Select the slide to be copied and drag downward to the blank slide you want to fill
 - Then change elements on the new slide to create new graphics

Program

View | Size & Attributes | Color & Texture | Styles | Logos | Background | News Edit |

FGND: SOLID
EDGE: BLACK
MDEO: VIDEO
SHDW: Char, Line

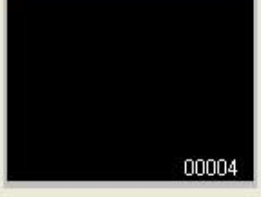
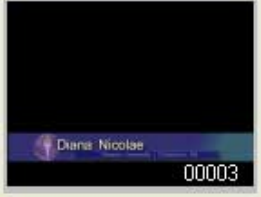
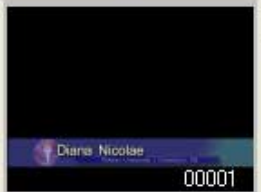
HLS: H 241, L 41, S 84

Trans: Top 35%, Bottom 35%
Gradient: Top 100%, Bottom 50%, Angle 0°

Texture: Enable, Tint, Size, Composite None, Invert, Alignment

STYLE: 9, POS(194, 390), SIZE(425, 025)

SCRL



Type Specs

Arial (TT) B / Browse...

Height 40 Leading 8 Rotation 0°

Width 105% Kerning 0%

Slant 0° Sml Caps 0% Freeform Sizing

Attributes

Shadow 5 Edging 2

Drop
 Offset
 Extrude
 Soft 3

Outline
 Glow
 Emboss

USING ADOBE PHOTOSHOP WITH INSCRIBER

TO CREATE ON-AIR 'PROGRAM' GRAPHICS

NOTE: PHOTOSHOP GRAPHICS WILL ONLY INTEGRATE WITH THE SYSTEM IN CONTROL ROOM 2.

1. To make a graphic in Photoshop that will display properly in the 16:9 aspect ratio, use the preset size "864 x 540 Std. NTSC 601" with a resolution of 72 pix/inch. The image will be "squeezed" appropriately when rendered in Insciber. In newer versions of Photoshop you may be able to use the preset "NTSC D1 Widescreen" which makes a frame of 720 x 486 but uses the widescreen pixel aspect ratio correction.
2. If you enable the Ruler view and set it to display in percentage, you can set guidelines at 10% / 90% on all sides and this will correspond to title-safe markings.
3. Insciber can import Photoshop files natively (interpreted as flattened images) but maintain transparency through an alpha channel automatically. So if you want to create a keyable overlay in Photoshop, just retain the checkerboard background and it will transfer okay. You do not need to create a separate alpha channel / layer.
4. SAVE as a Photoshop file (PSD).
5. In the Insciber application, open a blank page / CG and go to the bottom set of tabs. Select the Background tab, and on the lower left of that tab click the box that says "FILE". A grey square should appear on the right side of the tab. Click this square to choose your image, and open it.
6. MAKE SURE THAT "Size to fit" IS CHECKED!!! This will force Insciber to center the image and maintain the proper aspect ratio, plus allow the correct conversion from 601 square pixels to RGB non-square pixels for correct NTSC display output.
7. If you are using an image with an alpha channel, make sure that "Ignore Alpha" is NOT checked.

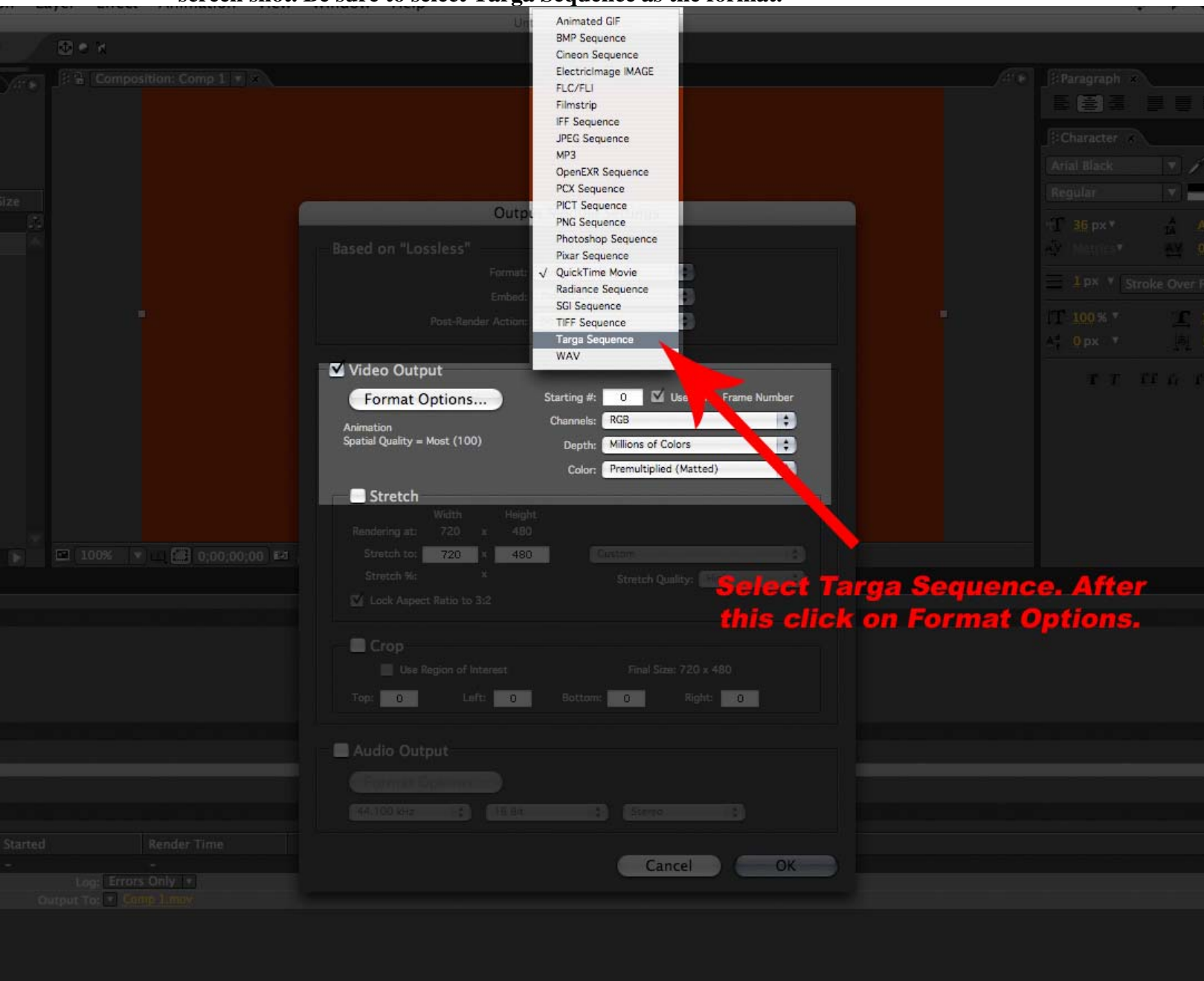
Need to make changes to the graphic? You can update a graphic in Photoshop, save it, and Insciber will automatically update the graphic live while on-air as long as the filename has not changed – without manually reloading or importing anything in Insciber.

Integrating Custom Animations from After Effects to CG Extreme

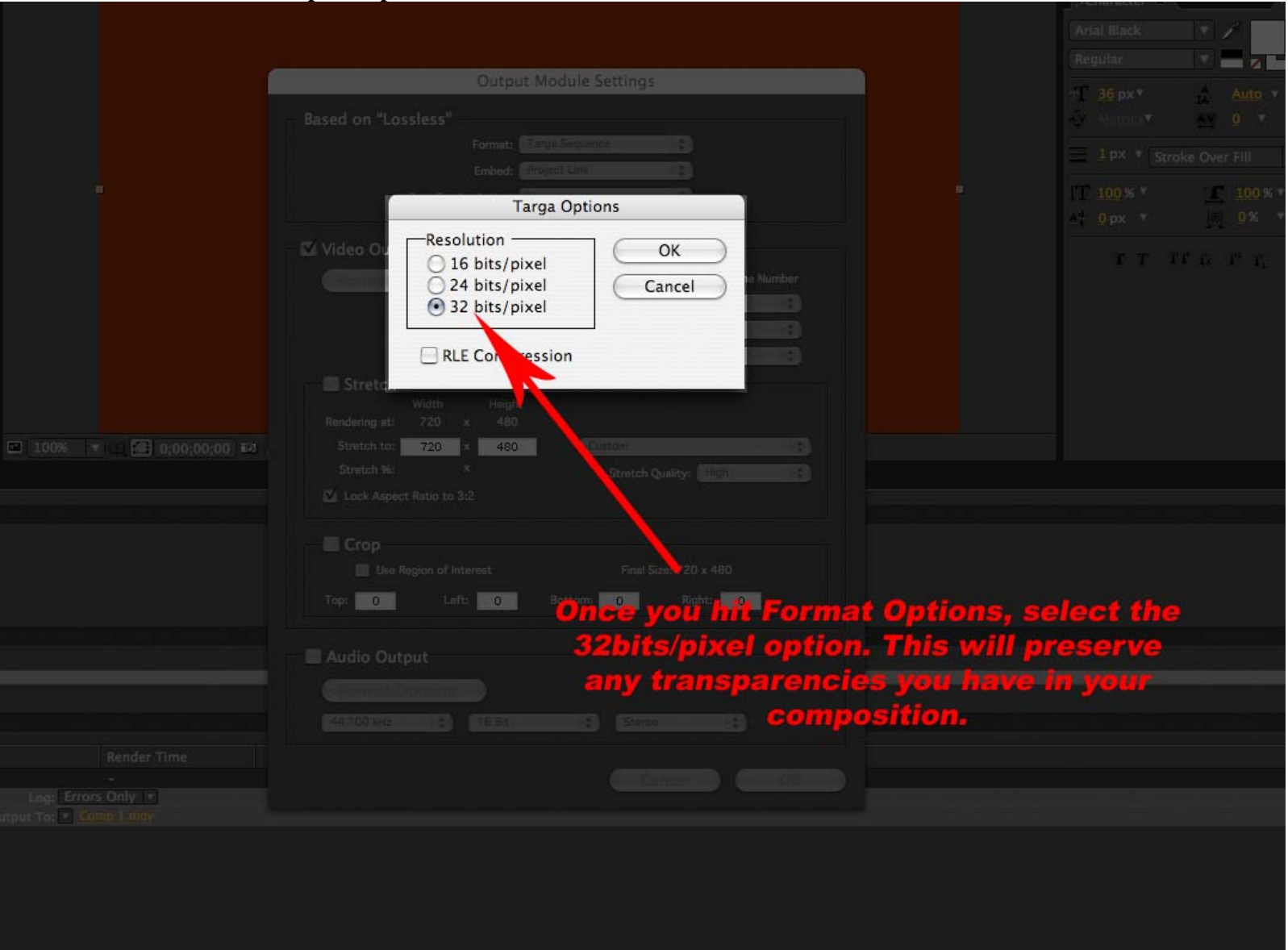
Step 1: First things first, start a new composition in After Effects and create whatever you heart desires. Make sure it is NTSC preset, the frame rate is set at 29.97, and be aware of title safe areas.

Step 2: After finishing your custom graphic, make sure all your composition settings are correct. After this click ctrl+m to bring up the render queue.

Step 3: Ignore Render Settings. Select the Output Module. This will bring up this screen shot. Be sure to select Targa Sequence as the format.



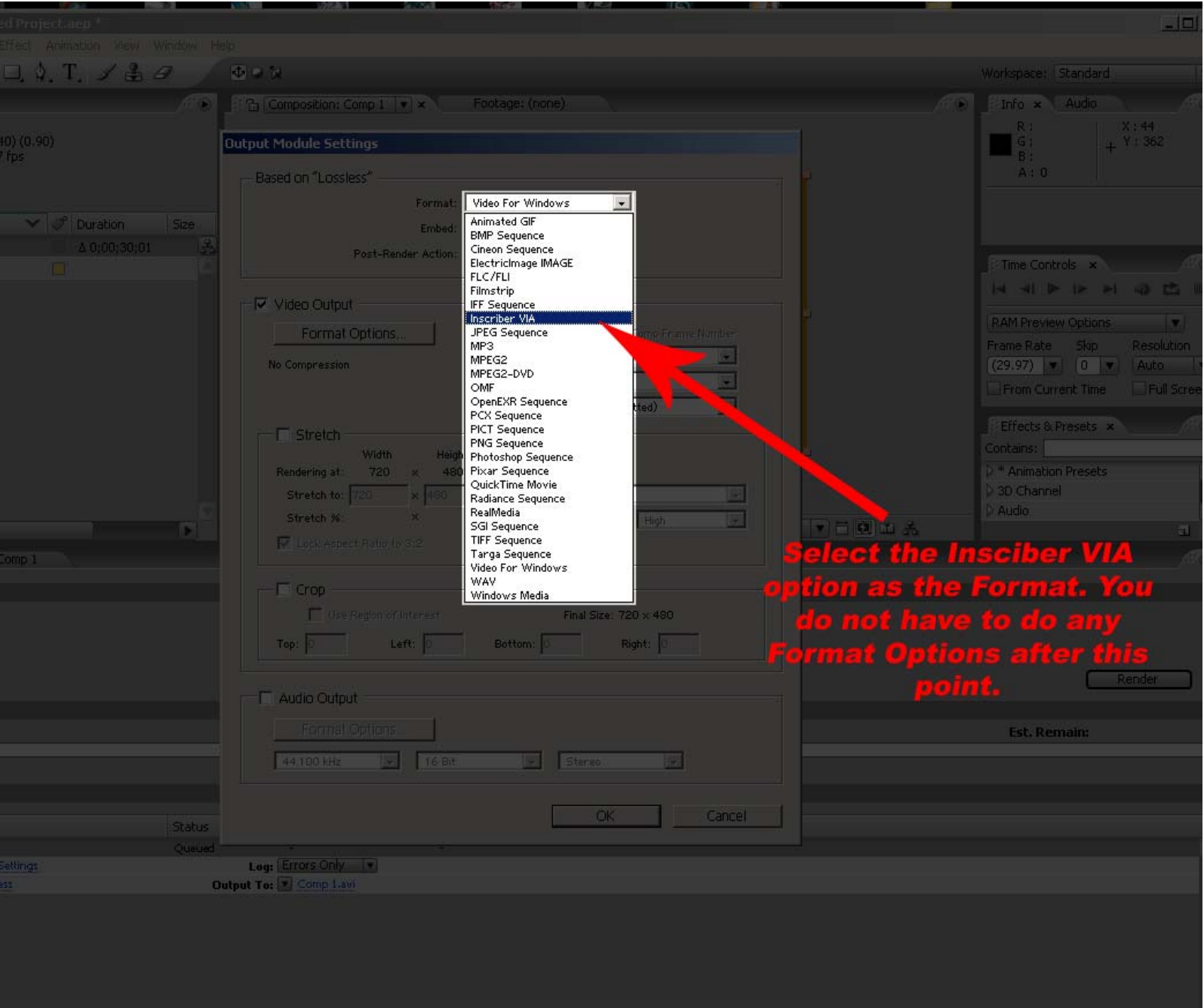
Step 4: Once you have selected Targa Sequence, click on Format Options and select the 32bits/pixel option and click OK.



Step 5: Once you finished selecting the format hit OK. Back at the Render Queue select the OUTPUT TO option to change the name of your file. A little advice, create a new folder and make that the OUTPUT destination. The reason for this is because in a Targa Sequence each frame of your composition is rendered out as a individual picture.

Step 6: Create a new composition with the same settings from Step 1. This time import your Targa Sequence to your project. What you will do is drop the Targa Sequence into your timeline.

Step 7: Go to the Render Queue once again. Click on Output Module. This time for the Format select INSCRIBER VIA.



Select the Insciber VIA option as the Format. You do not have to do any Format Options after this point.

Step 8: You do not have to do any Format Options after this point. Once again change the name of your composition and Render out the file. (Be careful of how long your composition is. The bigger the file the longer it takes for the animation to load on CG Extreme. Example. A 100mb(roughly 10 seconds) Via file will have a 5 second load time on the Sequencer for CG Extreme)

Step 9: Open CG Extreme. Click on File, Import, Import Animation. Proceed to find your VIA file. Once you find it CG Extreme will automatically load it into the sequencer. All you have to do is double click it on the left for the animation to start. Once again be careful of the size of the VIA file because of the loading time.

Q: What are the logins / passwords for the Inscriber systems?

A: Linear Suite: Username <CG Operator> and there is no password
Control Room 1: Username <CG Operator> and there is no password
Control Room 2: Username <CGXtreme Operator> and there is no password

Q: Where should I save my files?

A: In all cases, do NOT save any files to the desktop. They will be deleted!
Linear Suite: Use the internal media drive (Drive D)
Control Room 1: Use the “My Documents” folder
Control Room 2: Use the media drive (Drive D) and choose the subfolder(s).

Q: How can I import graphics that aren't on the local computer?

A: In all cases, you can use a CD-R or floppy disk. In Control Room 2 you can also connect a USB thumb drive or USB drive. Open the drive folder and locate the files to import. Copy these files to a location on the local machine, then import according to the instructions. DO NOT IMPORT DIRECTLY FROM THE EXTERNAL MEDIA!!

Q: The Control Room 2 system keeps freezing and/or crashing. What do I do?

A: Remove any USB devices, CD-Rs, and floppy disks. Then reboot. If the problem persists, seek assistance from the TV Engineer or TV Production Coordinator.

Q: The main graphic screen is all black, not checkered like normal. Or, when I type text or create graphics, the composition area of the screen is all black. How to fix?

A: This is a common ‘glitch’ with the graphics hardware. Simply exit the Inscriber software and re-start it. If the screen is still black, restart the computer completely and the normal working condition should resume.

Q: The Control Room 1 system output is overlaying old images over new ones, or displaying ghosted images on the program output. What's wrong?

A: This older hardware version requires the operator to manually refresh the program output. Each time you move something on screen, the program output adds it to the display without clearing first. To manually clear the screen, locate the PGM / PRV display window at the bottom left corner of the screen. Click the CLR button to clear the display output. Then click the PGM button to refresh the program output. If you do not see anything displayed, click PGM again.

Q: Why can't I “UNDO” anything like I can in other programs?

A: This is a limitation of the system. Save often, and/or save multiple versions of your project so you can manually revert back to one in case of a problem.

Q: When I click and drag an object to move it, it changes the scale or warps it. How do I change the position without changing the object itself?

A: Ctrl + Click and drag to move the object, every time.

Q: In Control Room 2, how do I make a graphic that is properly formatted for the LCD 16:9 screen?

A: Read the instructions on the root of the D drive for full details.

Q: I am clicking on an object to select it but it won't select. What do I do?

A: If you are selecting text, you must first choose the Text Tool. Then you should be able to highlight the text. If you are trying to select an object, pick any object tool and then click to select. If you still cannot make the program select the object, it may be on a different layer. Go to the Element menu and select Layer Control → Layer List to show the layers display. Click on a layer and then click the object. Go through all the layers until the object you want is selected.

Q: I have created a crawl or roll. How do I get it to move?

A: The animation will not appear on the Inscribe CG computer screen, but will appear on the program output. Double click the graphic in the left-side browser pane to trigger the effect. The motion may be delayed between 1 and 10 seconds while the motion is rendered before being displayed.

Q: How do I stop a crawl or roll?

A: Press the ESC key on the keyboard twice.

Q: How do I change the speed of a crawl or roll?

A: Choose the Effect Settings tab at the bottom of the screen. Click on Speed. Raising or lowering the numerical value will change the speed (1 is the slowest and 9 is the fastest).

Q: When I hit Return or Enter to move text down, the cursor moves but the text does not. How do I make text move to a new line?

A: This is an option setting. To enable it, go to the Element menu and choose Constrain → Locked Lines. If that option is checked, then it is enabled.

Q: How do I get the Copyright © symbol to appear?

A: While typing with the text tool, push Alt + [num key pad] 0 1 6 9

Q: How do I view the Title-Safe area on the screen?

A: At the bottom of the screen, choose the View tab. In the Markers section, check the box that says Video Safe Title Area.

Q: What graphics formats does Inscribe support?

A: Inscribe natively supports Adobe Photoshop files as flattened images, but preserves any alpha channels present. It will also support BMP, JPG, PNG, TIF, TGA and GIF files. Animated GIFs are not supported. For more information, see the "Using Photoshop with Inscribe" document on the root of the media drive (D) on the system in Control Room 2.