



Studio Graphics Operation

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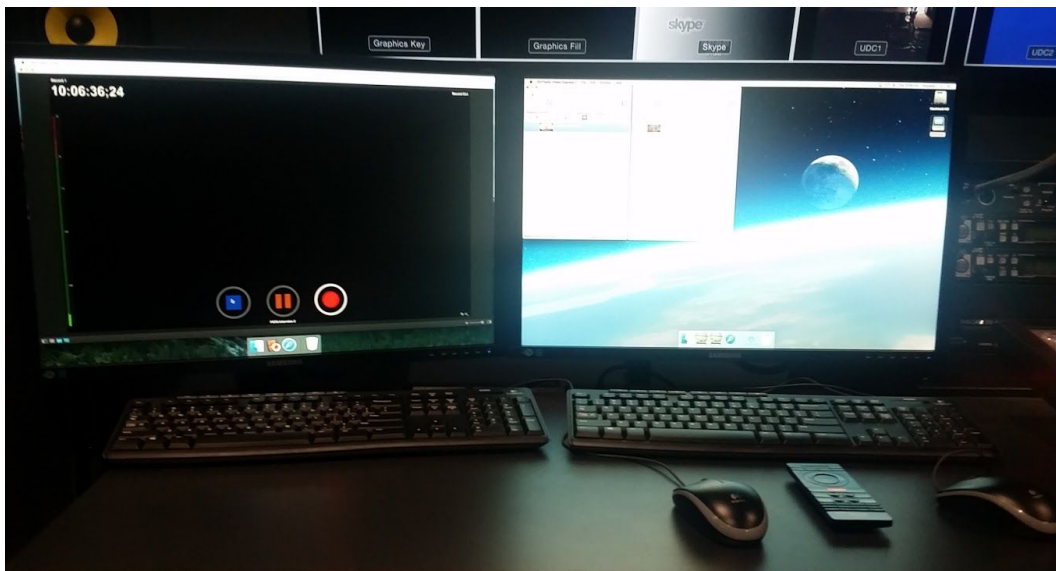
Welcome to the Studio Graphics Operation class! In this class you will learn to operate the studio graphics computer to create graphics and insert them into studio productions. In order to pass this class you must complete the instructor led hands-on training and score at least 70% on a proficiency test.

The Role of the Graphics Operator:

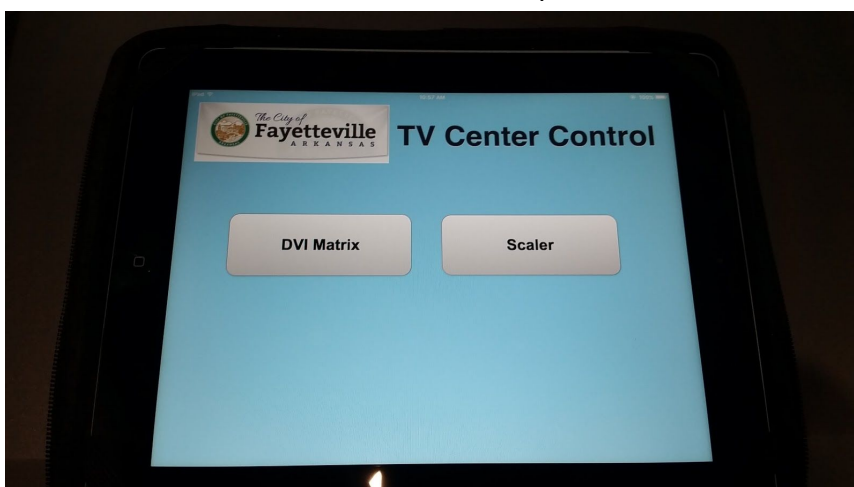
The Graphics Operator is responsible for creating all necessary graphics prior to the production. During the production they listen closely to the instructions of the Director and make sure they have the correct graphic ready to use. Occasionally a special graphic may need to be prepared on the fly during the production. The Graphics Operator needs to be prepared if this situation arises.

Getting Started:

First, turn on the monitor for the graphics computer.



Next, locate the Studio Control iPad, and press the “DVI Matrix” button.



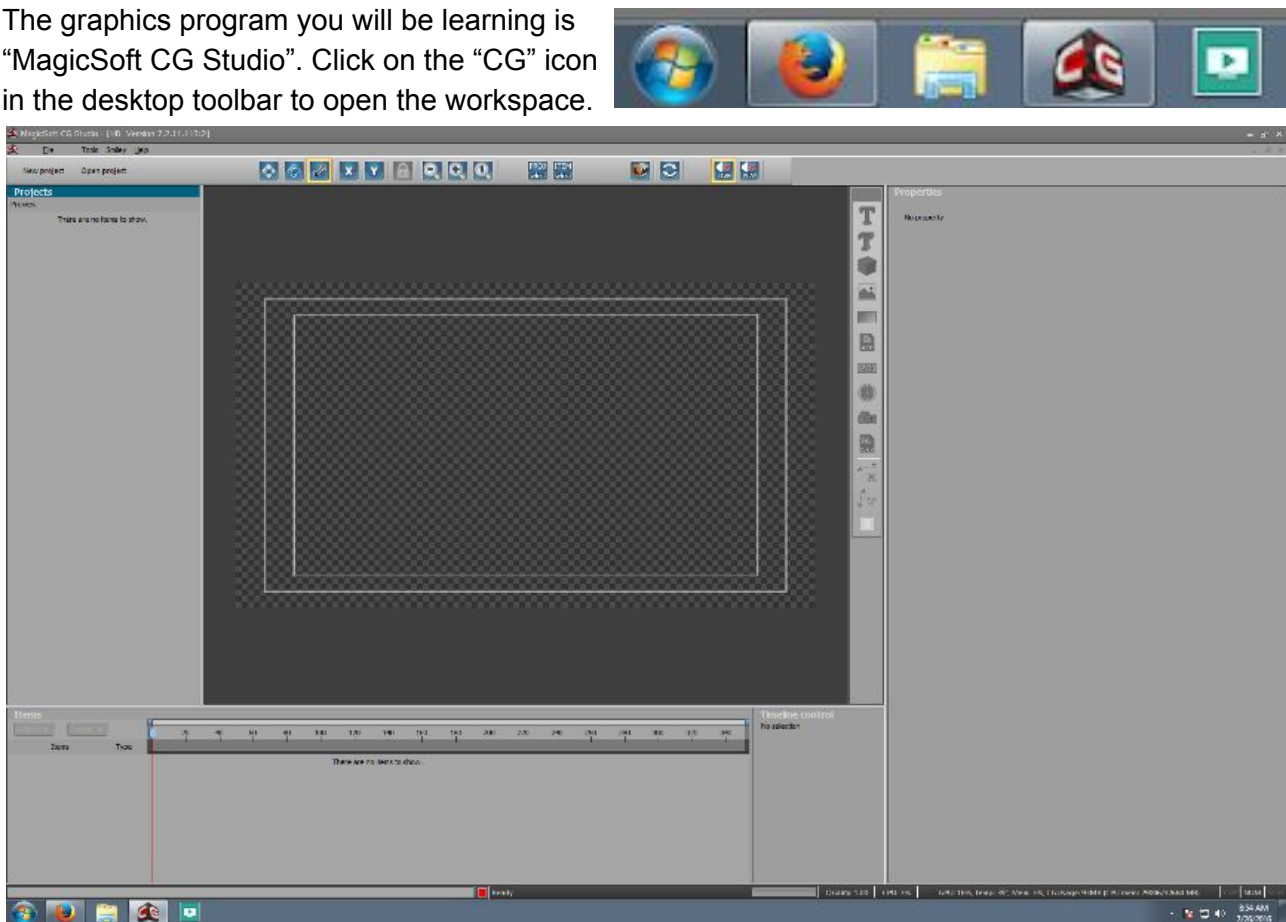
In the “Display 2 Video Source (Right)” dialog box, select the “Graphics” button.



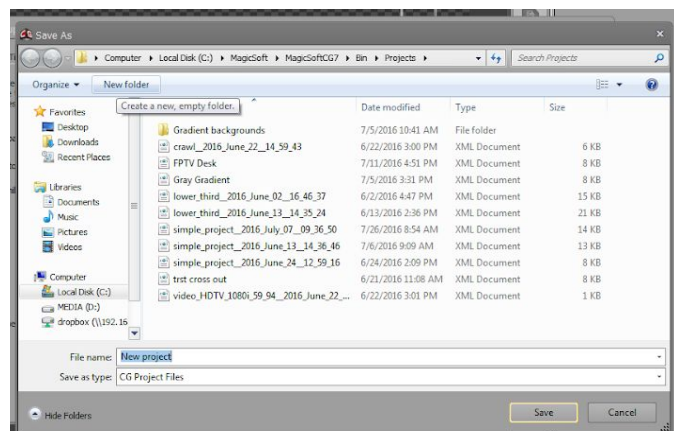
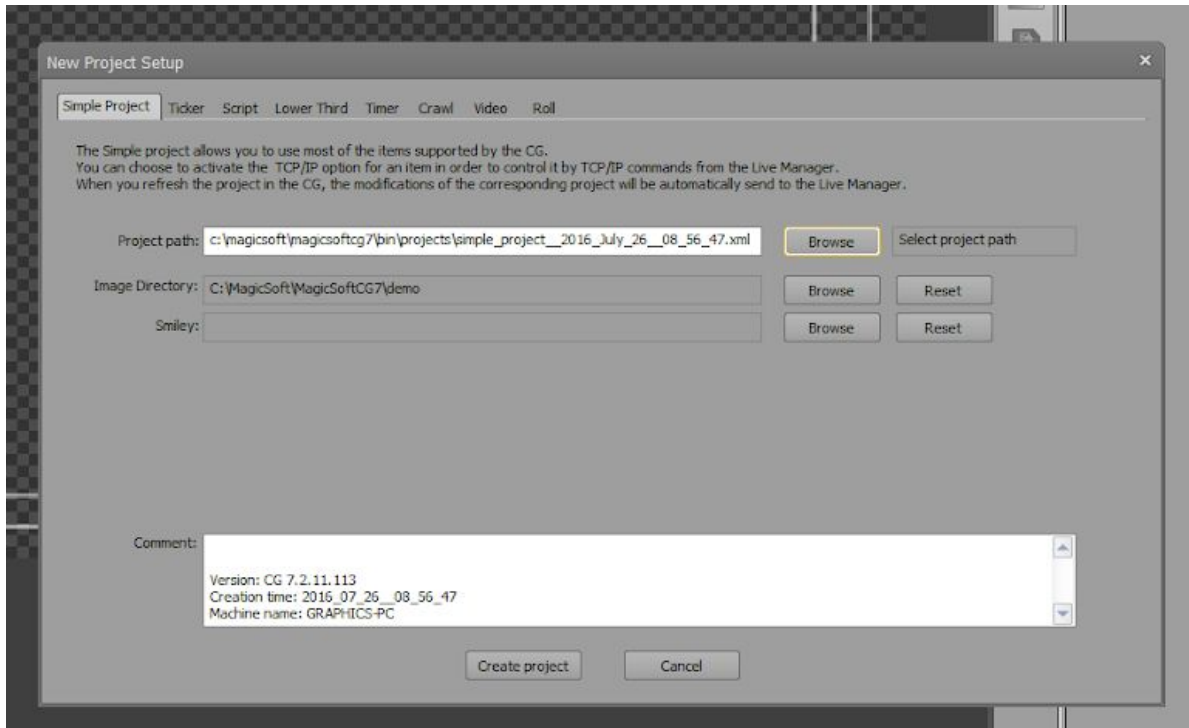
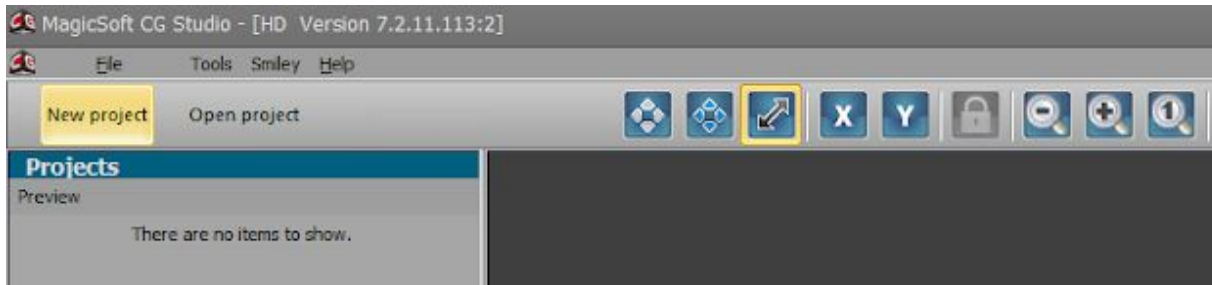
You're done with the Studio Control iPad, so return it to its charger.

Graphics Software

The graphics program you will be learning is “MagicSoft CG Studio”. Click on the “CG” icon in the desktop toolbar to open the workspace.



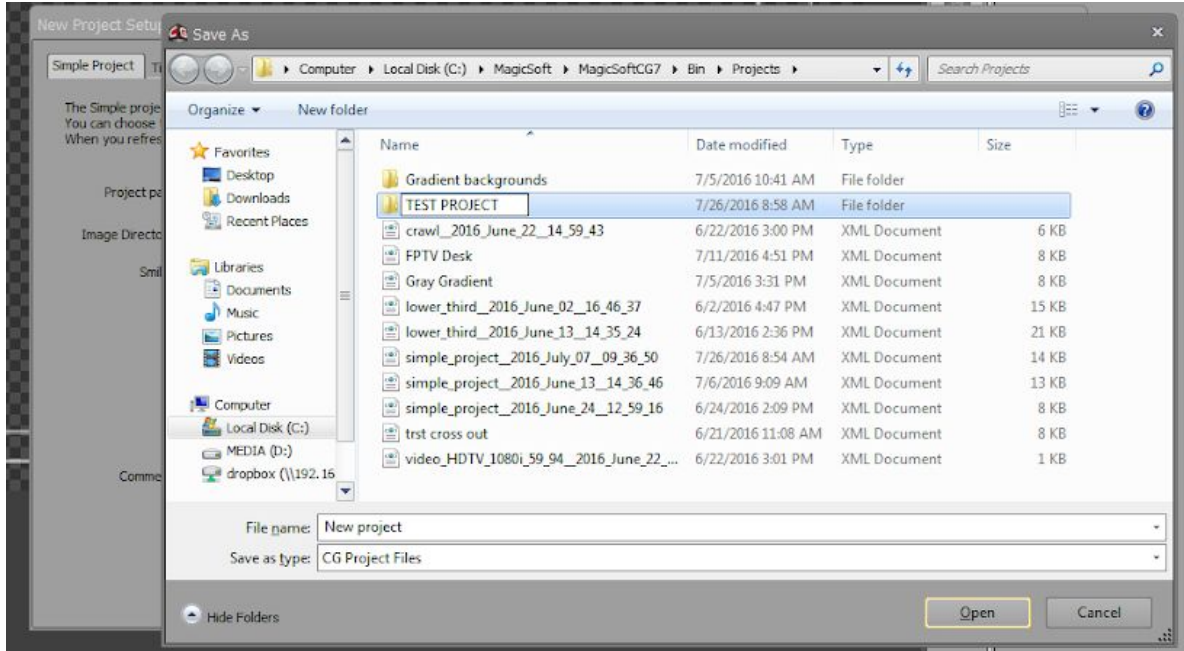
All of the graphics that we create with CG are called “projects”. In the upper left of the screen, click on the “New Project” button.



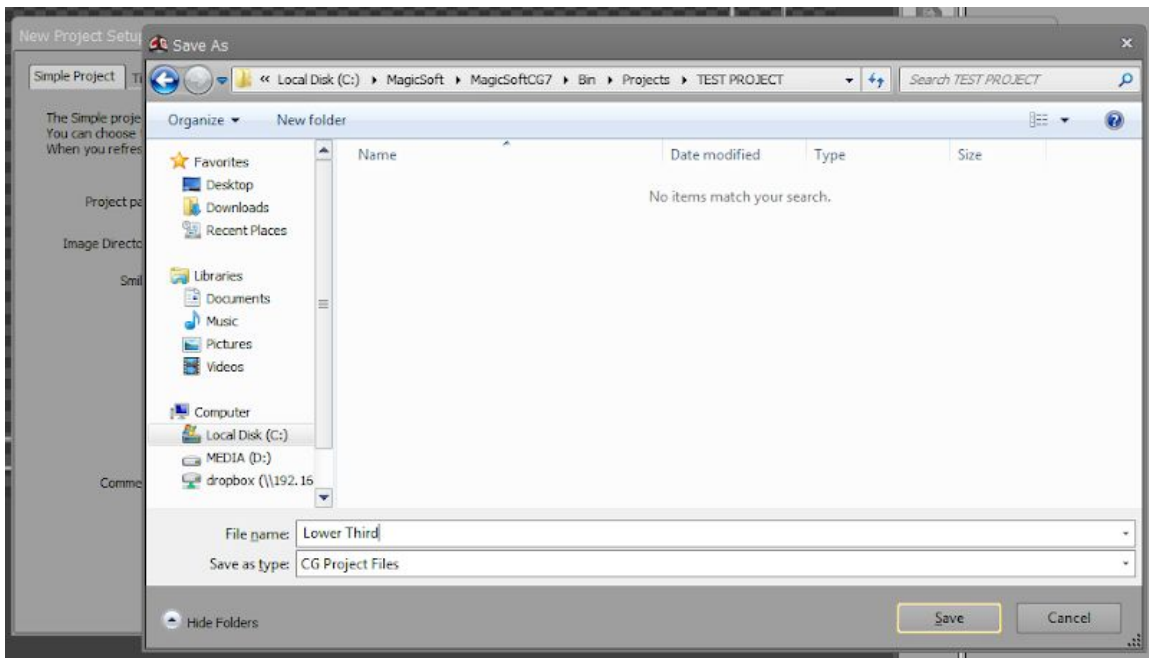
Click the “Browse” button. This will open a dialog box to save your project files in the folder

C:/MagicSoft/MagicSoftCG7/Bin/Projects.

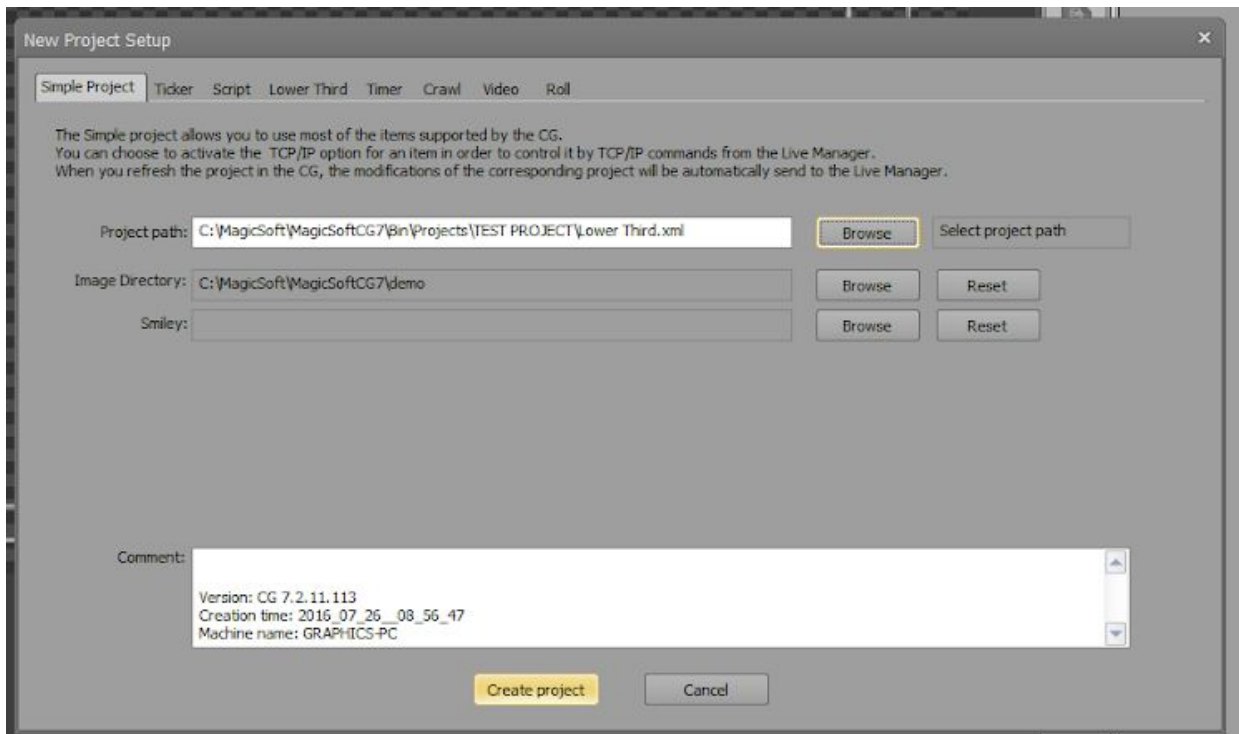
Click on the “New Folder” button, and rename the folder to the name of your show, in this example “TEST PROJECT.”



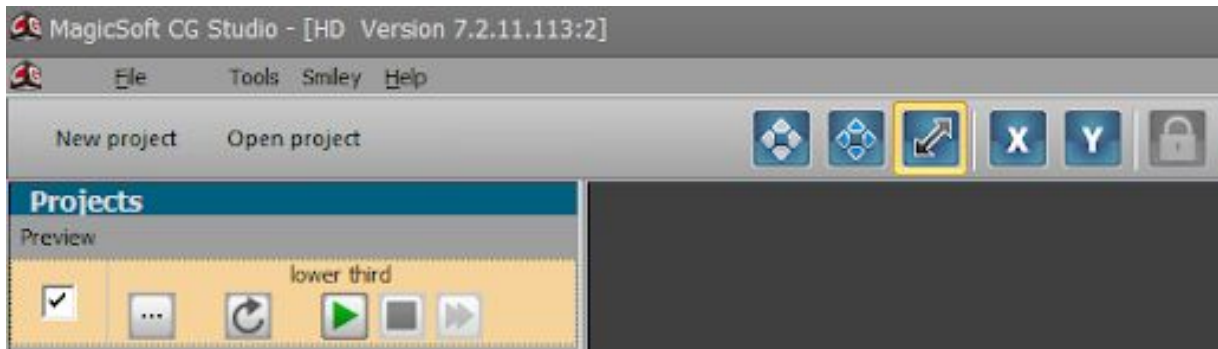
In the “File Name” area at the bottom of the dialog box, name the project file (graphic) you will be creating, in this example “Lower Third.”



Finally, click the “Create Project” button.

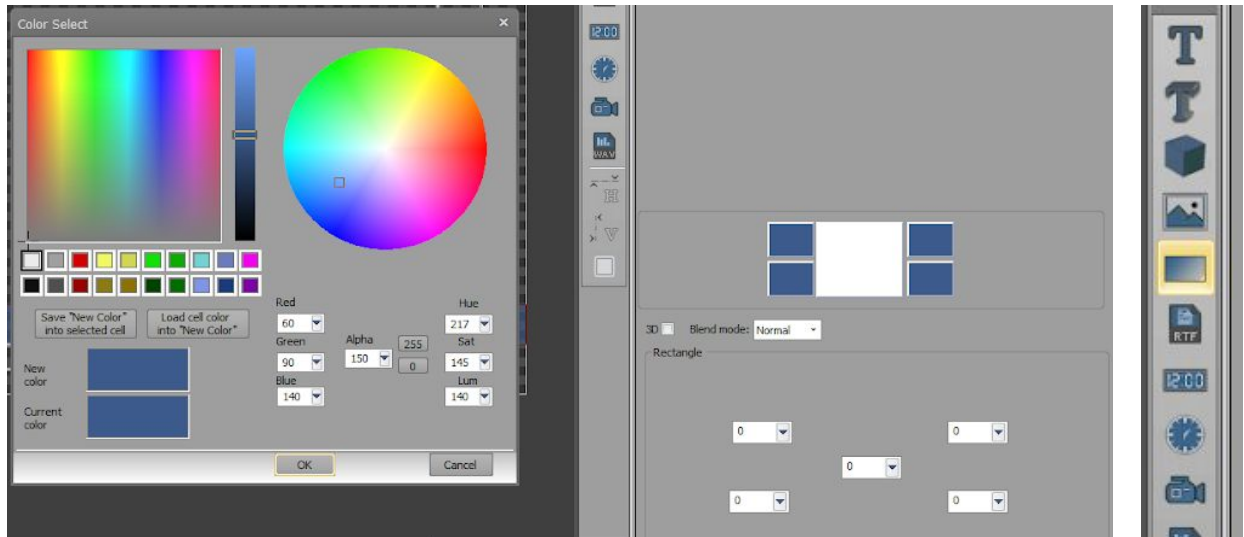


Now you will have a project slot under the “Projects” area of the workspace, and are ready to begin creating your new graphic.



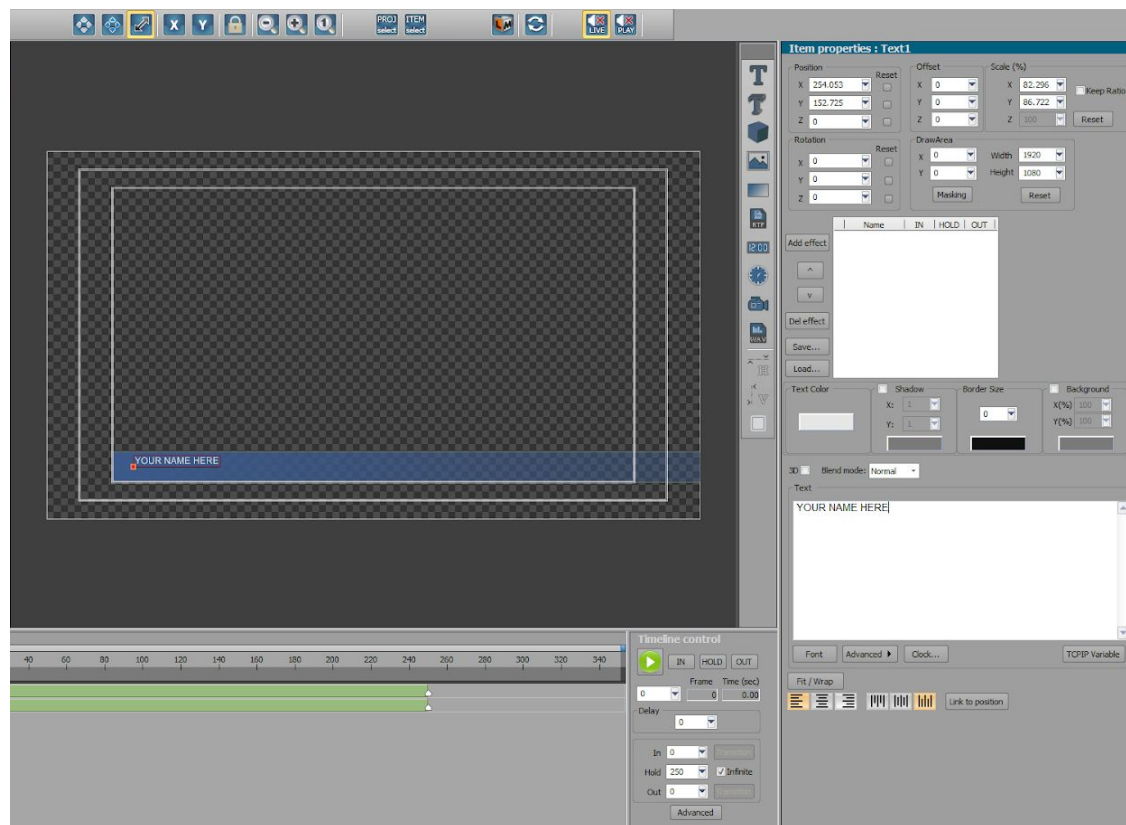
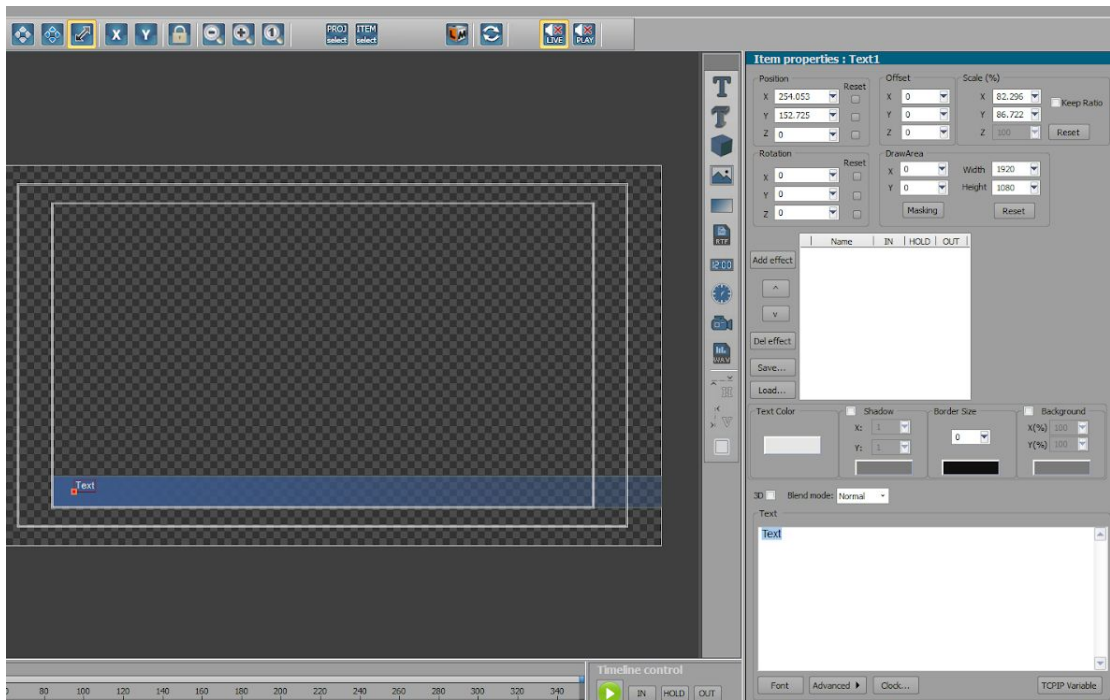
Building the Lower Third Graphic.

To help the text stand out from the video, we'll begin by creating a rectangle gradient. Find the "Gradient" tool in the toolbar on the right hand side of the workspace. Click, hold, and drag it to the preview area in the middle of the workspace.



Next, we'll select the colors for our gradient. Select the upper left color box in the right hand of the workspace. This will bring up a "Color Select" dialog box. Pick the color you'd like for this area of the gradient. We want the left two gradient quadrants to be opaque to help the text to stand out from the background. We'll set the opacity for this quadrant by adjusting the "Alpha" value under the color wheel. Its default is "150", which is semi-transparent. Set the value to "255", or full opacity. Click on "OK". Repeat the process for the other gradient quadrants. Once the gradient is designed, we'll add in the text for our graphic.

Click on the “Text” tool in the toolbar, hold, and drag it over the gradient in the workspace.



Click in the “Text” box in the right hand of the workspace. Type in the text you’d like to appear on screen. The font, font size, font color, and justification can all be adjusted in a similar manner to familiar word processing software.

Notice that the “Resize” tool is selected in the top toolbar. You can click and drag one of the corners of the text box in the workspace to adjust the size. To move the text, you’ll need to select the “Move” icon, with the four grey arrows.



With this tool, click on your text box, then hold and drag it to the desired position. For this example, we’ve placed the gradient and text just within the inner rectangle on the workspace. This is called the “Title Safe” area, and it is best practice to have your onscreen text appear within this area.

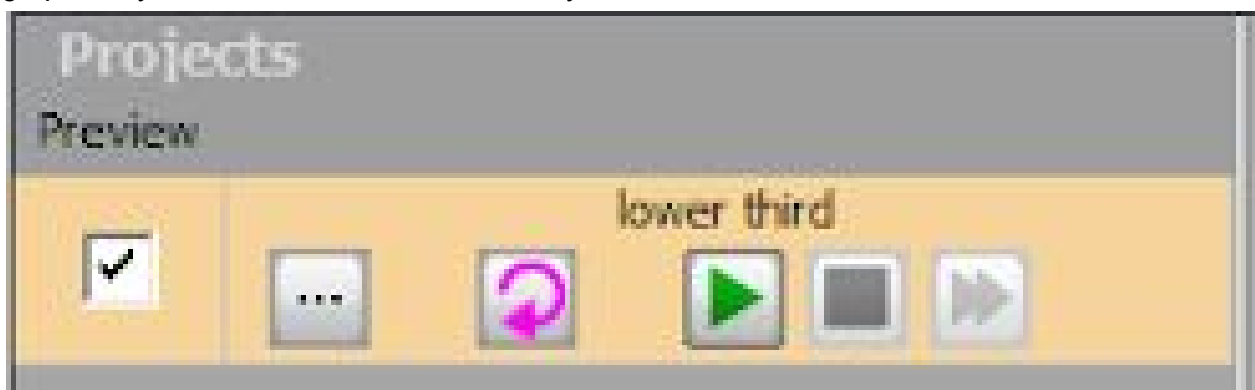
Creating New Graphics:

On the left side of the screen you will see a beige rectangle with the name of the graphic that you have just created. In order to begin working on another graphic you will need to click on the “New Project” button. Repeat this process every time you are ready to start a new graphic.

Remember to save your work every time you make a new graphic or a major change to an existing graphic.

Sending Graphics to the Video Switcher:

Once you have finished building all of your graphics for a production be sure to note their order and be prepared to select the correct graphic when it is called for by the Director. To send a particular graphic to the switcher, click on the pink “Refresh” button, the circle arrow, in the upper left of the workspace. Then, click on the green “Play” button. Your graphic will now output to the “Graphics Fill” input on the Switcher. Once you have done that the Technical Director will be able to use that graphic in the production when the Director calls for it. When the Technical Director is done with the graphic, hit the square “Stop” button. When it is time for the next graphic in your cue, click its associated ‘Play’ button.



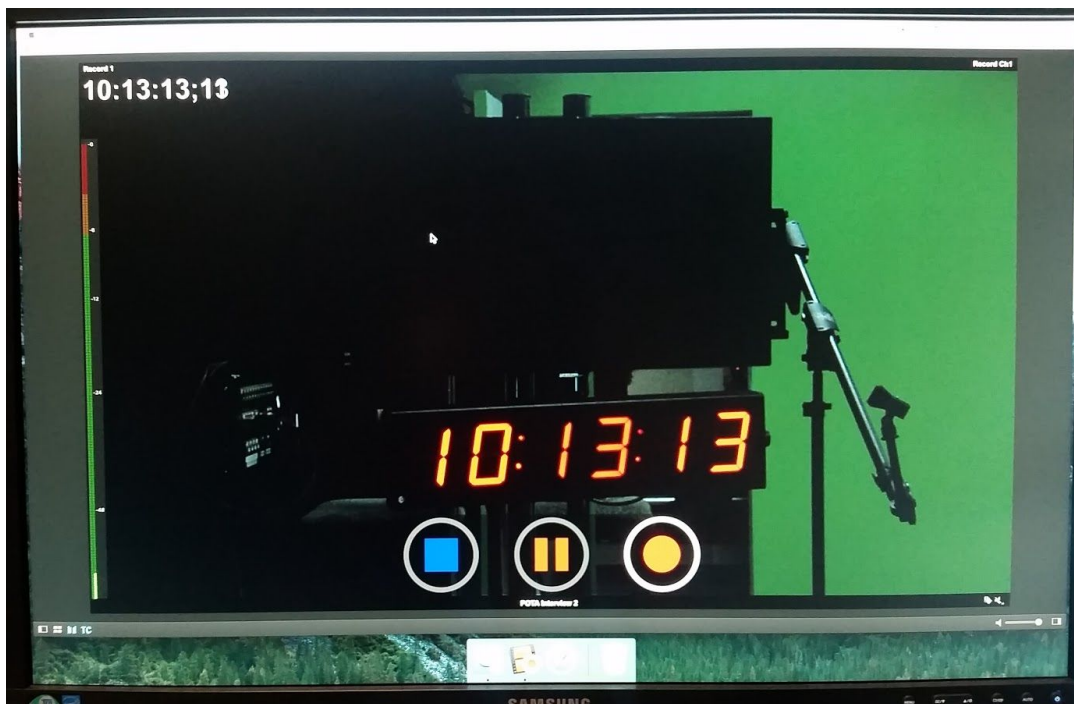
Graphics and the Switcher:

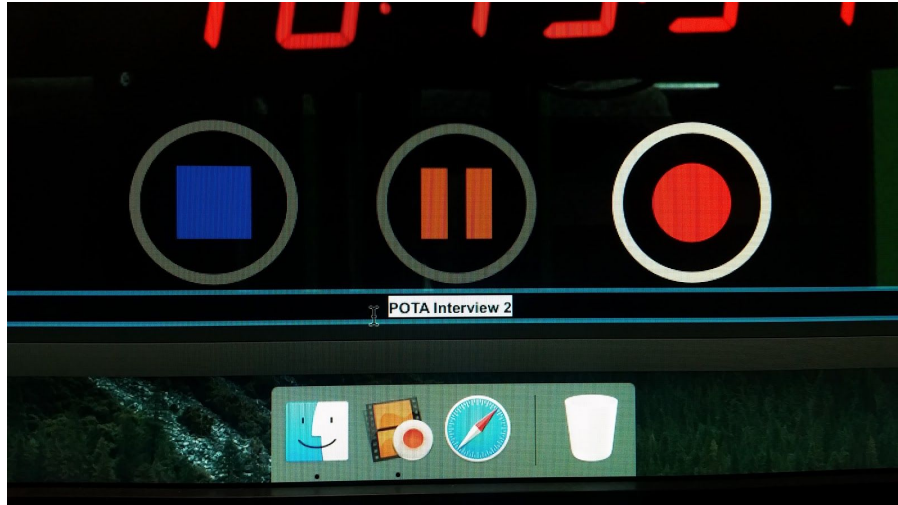
On the lower right part of the switcher are the 'Downstream Keyers' or 'DSK' buttons. These buttons are used to bring in or take out graphic overlays. There are buttons for both DSK 1 and DSK 2. The reason there are two Downstream Keyers is so you can have multiple graphics up on the screen at one time. DSK 1 has both a 'CUT' and an 'AUTO' button. Pressing the 'DSK 1 CUT' button will instantly bring in a graphic and pressing it a second time will take that same graphic out instantly. Pressing 'DSK 1 AUTO' will bring in a graphic with a dissolve transition and pressing it again will remove that same graphic using a dissolve transition. The same is true of the 'DSK 2' buttons. The "DSK 1 TIE" and "DSK 2 TIE" can be selected to "Tie" a graphic to the video source it appears over. Thus, when you switch to the next video source, the DSK graphic will cut or dissolve with its associated source. When you switch back, the DSK graphic will be switched with it.



Recording:

All studio programs are recorded directly to a hard drive. This hard drive is accessible through the computer on the left of the table. To access the hard drive you'll need the Production iPad. Turn it on, and select "DVI". Then press the "Recording" button under the "Display 1 Video Source (Left)" tab. The left screen should now show the recorder controls, as the image below.

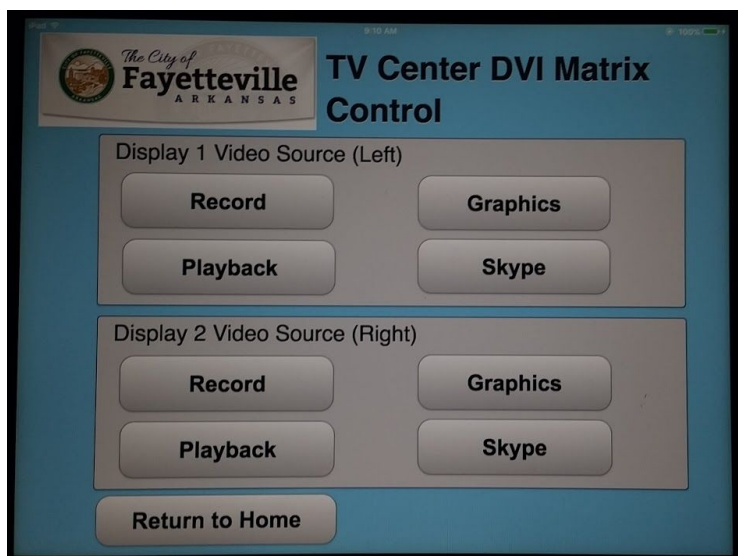




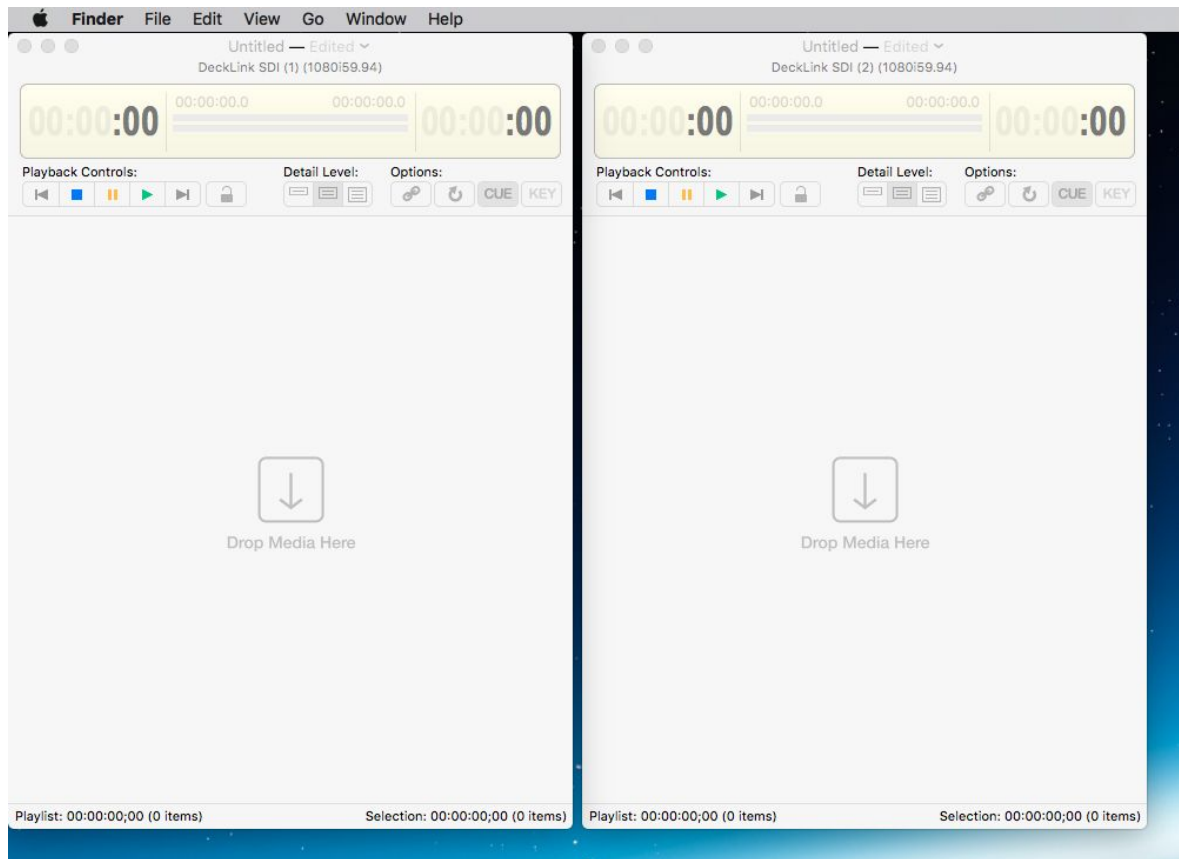
To stay organized, you should name your recording. Using the left mouse, select the text box at the bottom of the screen. Use the left keyboard to type in the new name. To start recording, select the record button (the red circle). Each time you stop recording (the blue square) you will create a video file on the hard drive. In order to access these files for post production work at the Television Center, you will need to be qualified to use the editing equipment. See a staff member for information about enrolling in editing classes.

Using the Playback Devices:

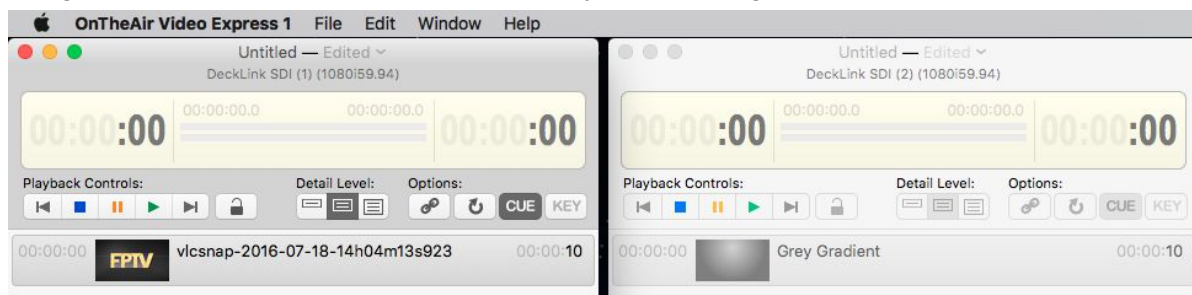
To use the Playback Devices, you'll need to switch one of the display monitors to "Playback" using the iPad Studio Control. Select "DVI Matrix" as before. Then, press the "Playback" button for the monitor you'd like to use. Finally, reconnect the iPad to its charger.



The FPTV Studio is equipped with two DeckLink playback devices with software control, as seen below. Video, sound, and graphics files can be loaded into the playlists by dragging files from their respective folders directly onto the “Drop Media Here” icons.



The computers controlling the playback devices are locked in the server room, and cannot be physically accessed by the public. You’ll need to have your files on a cloud based service like Google Drive, or have a staff member assist you in loading files across the local network.



Once you have files loaded into the playlist, as seen above, click the green arrow “Play” button for the graphic you’d like to see on screen. The device will output the graphic to the respective input on the switcher, either “Playback 1” or “Playback 2”.

TIPS FROM THE PROS:

1. Simple design is almost always superior to complex design.
2. Keep all text within the “Title safe” area to ensure that it won’t be cut off on broadcast.
3. Don’t crowd text onto the screen. Consider breaking up large blocks of text across multiple graphics.
4. Be conscientious with your color selection(s). Most professional lower thirds are just a combination of white or black and another solid color. When you’re selecting the colors for your lower third, it’s usually best to stick to subtle colors that won’t distract from the video you’re working on. Look for dominant colors in the video footage as a guide to your color choice.
5. Drop shadow and colored backgrounds can help text stand out from the underlying video.
6. Modern sans-serif fonts are more legible than their “script” counterparts. Steer clear of thin, cursive, or overly ornate fonts.
7. You’ll want to take a look at your kerning (spacing between characters) and fix any tracking issues. No matter the font, you’ll likely have to adjust kerning issues by hand.

