William Montgomery

Designing Vector Graphics

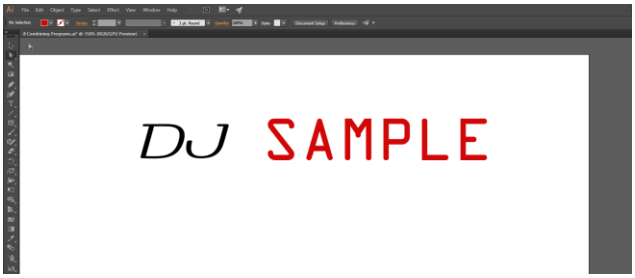
Project 8: Combining Programs

For this project I decided to prototype live visuals for a made up DJ using Illustrator, Photoshop, Magic Music Visuals "Magic" (https://magicmusicvisuals.com), and Sony Vegas.

1. Logo Text

The main focus of DJ visuals starting a show or ending a show is almost always the DJ's name, so I decided to make this the focus for my fake DJ, "DJ Sample". I started with two fonts, Rocket Script, and OCR A Std, to be the foundation of the name.

Fonts can be found here: http://www.dafont.com/rocket-script.font and https://typekit.com/fonts/ocr-a-std (I'm not sure where I actually got OCR A STD from as I've had it for a while, but apparently it's on Typekit)



I wanted the two words to be hooked together on the "J" so I used some slicing and node editing to get this.

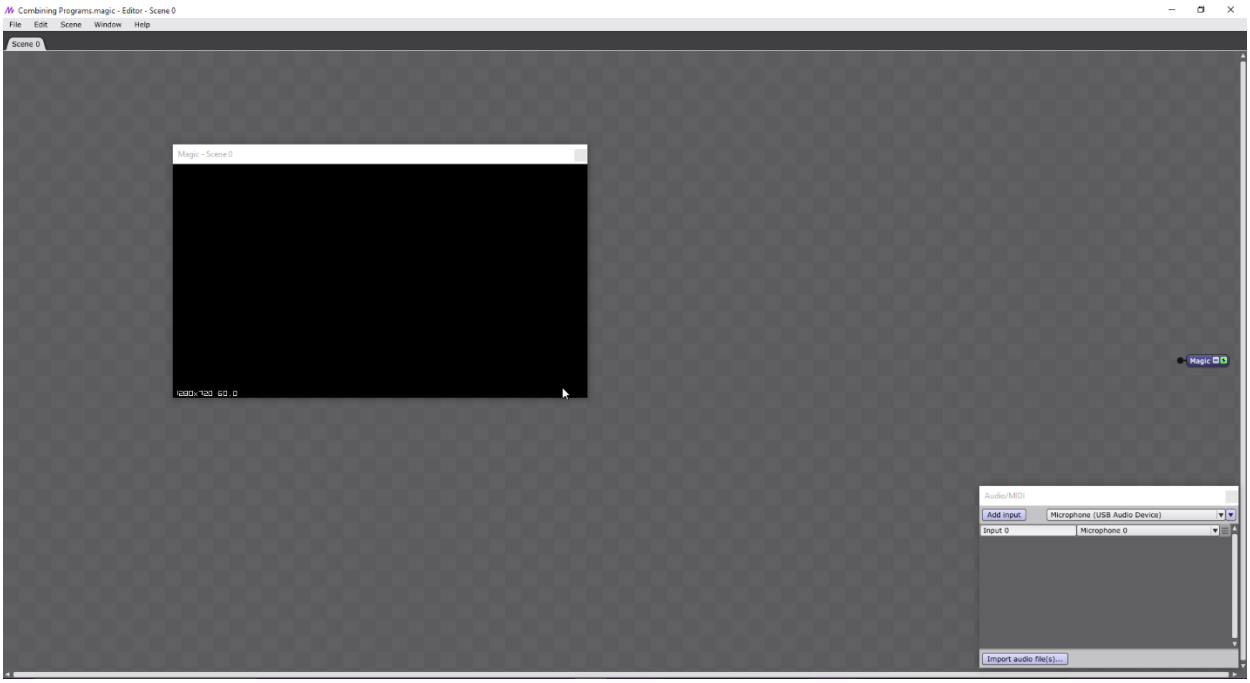
Then, to make the name look more unique I messed with some more node editing until I decided upon the image below. This style quickly became the theme of the visuals associated with the name.

I then copied “Sample” to make a drop shadow effect to try to give more depth to part of the name:

Once I was happy with this I exported it to Photoshop to make it a clean PNG for use with Magic.

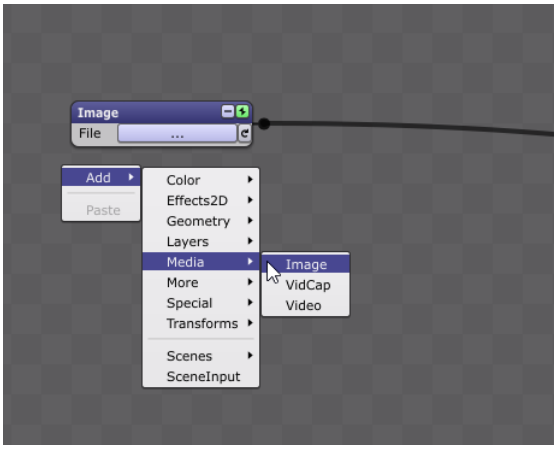
I will be doing a brief overview of how Magic works so that my screenshots actually make sense to what is happening. If anyone has any questions about it I’m happy to answer as I really enjoy using this software.

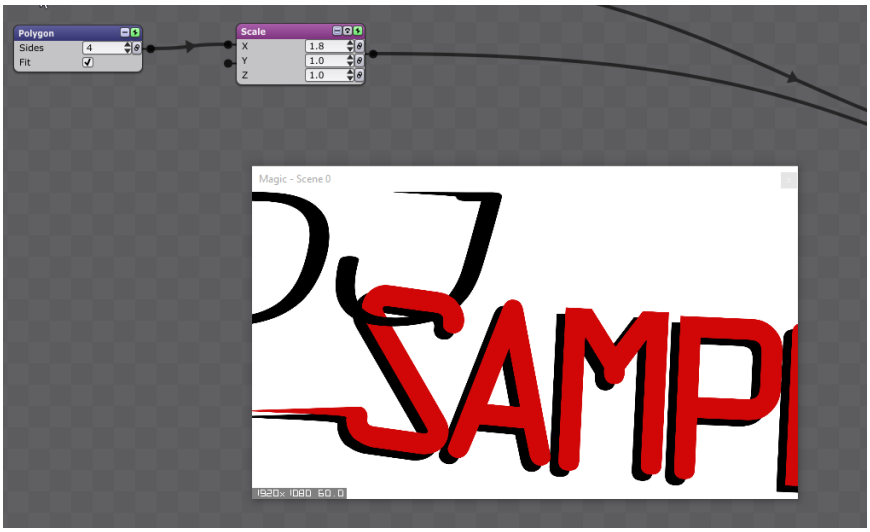
To start, here is my blank Magic project:



Magic is based around input via “Modules” that are basically visual blocks you can connect to one another to create effect chains. Each chain finishes at the small “Magic” block on the far right, which basically renders what’s happening. The window in the center of the screen is the preview window, which you can watch to see how the visuals are changing in real time. In the bottom right is the Audio/MIDI window which interprets the audio or input that the visuals react to whether it be a microphone, an MP3 file, or even a MIDI Device like a Casio Keyboard.

With the Magic project ready I began by adding my PNG text to the window and then adding a white polygon to serve as a temporary background. You can see how the effects chain is starting to form from the Polygon, to the Scale effect. When making really unique effects, you can end up using several chains that sometimes have sub chains, multiple inputs and outputs, or long lines of effects. This will come later on.

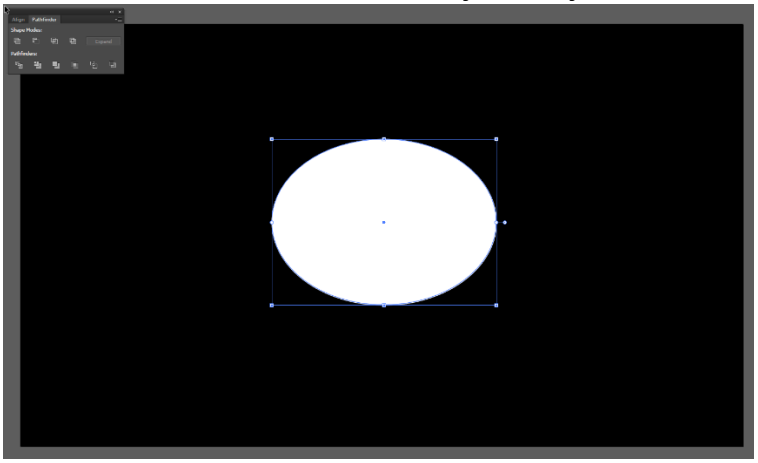


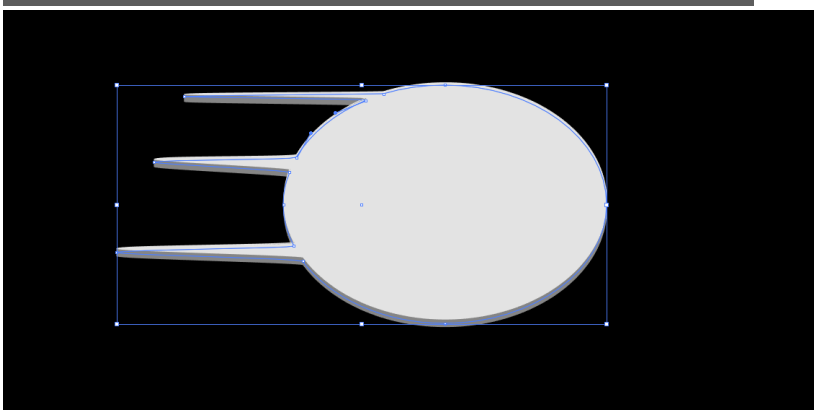


2. Text Backing

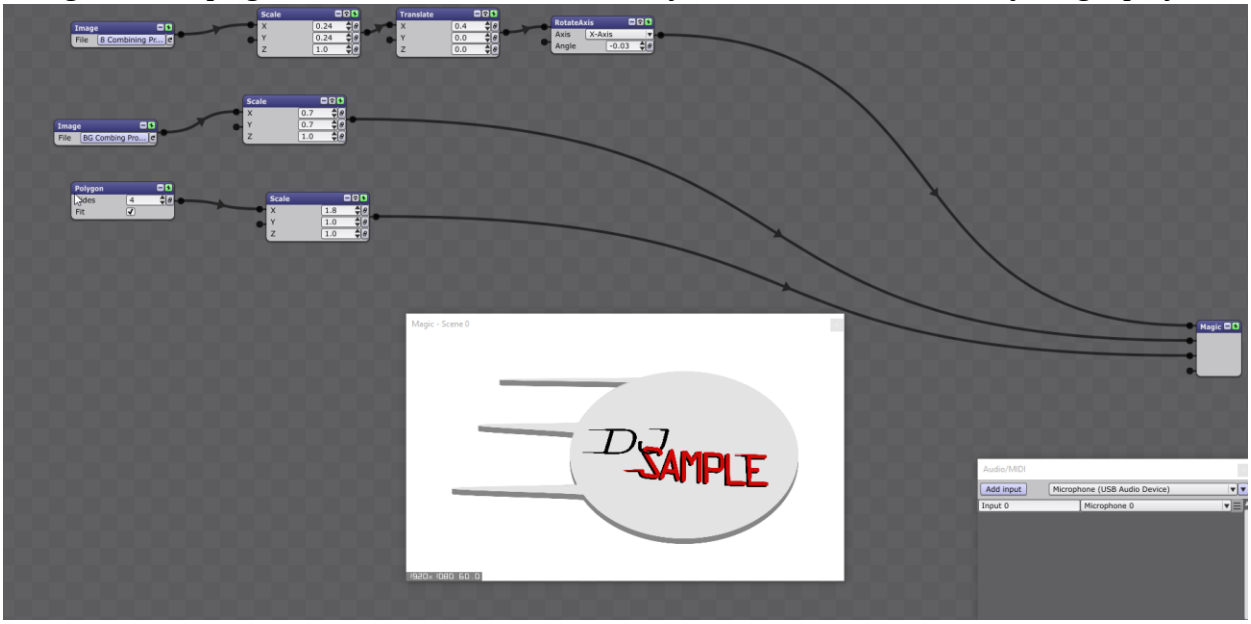
At this point I realized how flat the text looked just sitting on top of what would be a background image, so I decided to create a 3D vector shape in Illustrator to sort of “frame” the text.

I started with a simple white ellipse and then, using 3D beveling and some more node editing, I created an oval frame in the same style as my text.



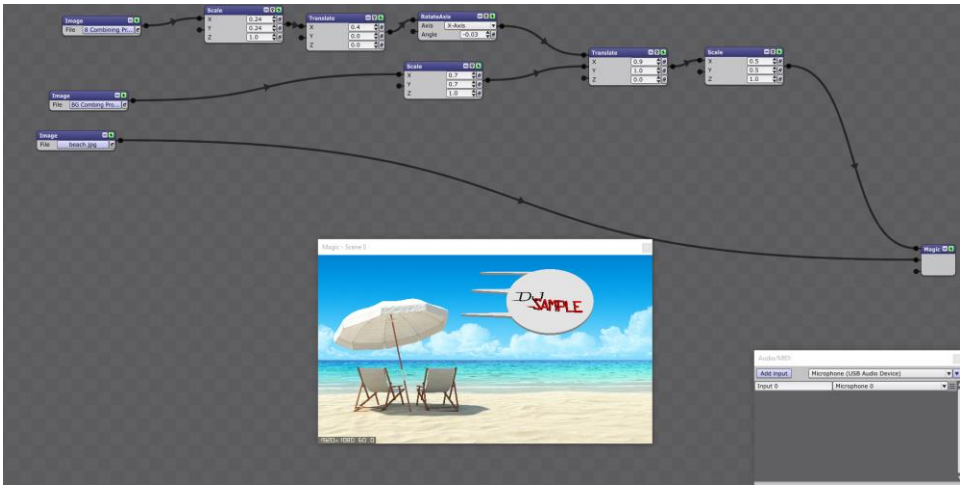


Using Photoshop again I created a PNG from the object and then added it to my Magic project.

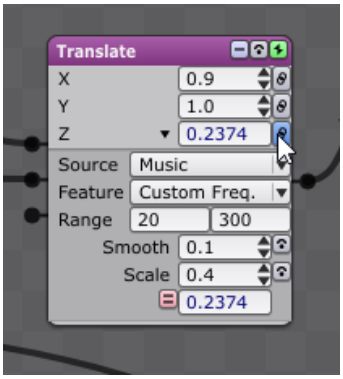


3. First full draft

For the background I decided to use a beach picture, because at some point every DJ does a beach party so I figured it was a pretty standard theme to use. The beach image came from: http://www.avtar.duckdns.org/umbrella-beach-chair.html



After I set out the basic visuals I then imported the song that would act as the input and began setting up how each module reacted to the song.



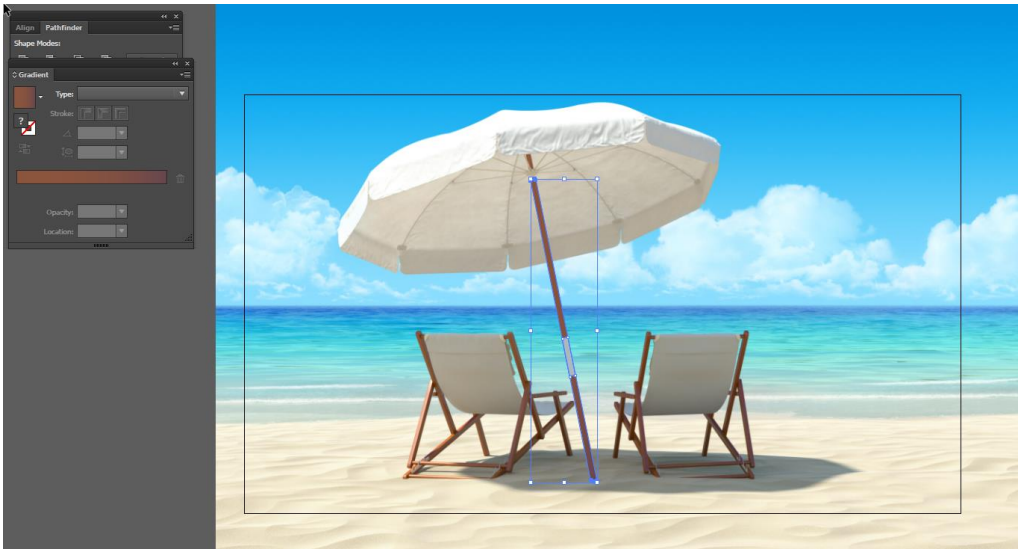
This function is the core of Magic. Each module has a link button (sometimes several) that connects the module's variables to the volume, pitch, frequency, or tone of the audio. This is how the visuals move with the input.

From this point on I messed with several ideas until I had a good combination of effects.

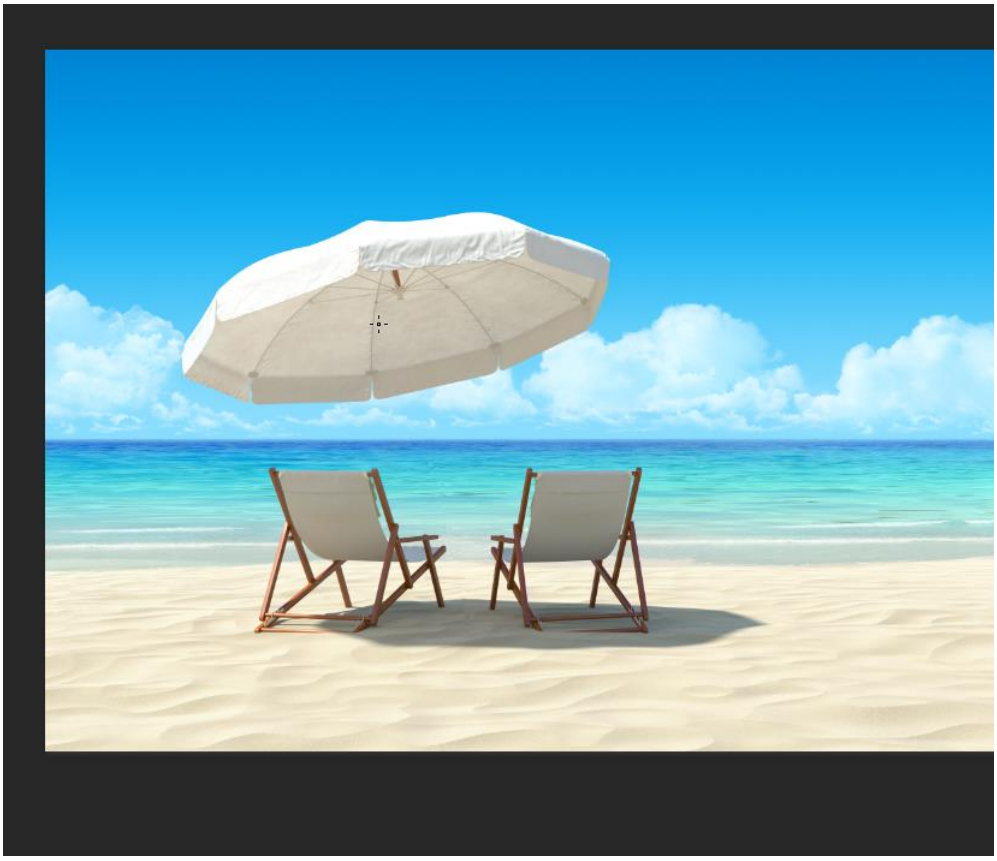
The idea I really liked from this layout was the music's white waveform right on the horizon, however you can see in this image that the umbrella's pole was breaking the line of the horizon and messing with the depth of the effect. I decided to fix this with some vector editing.

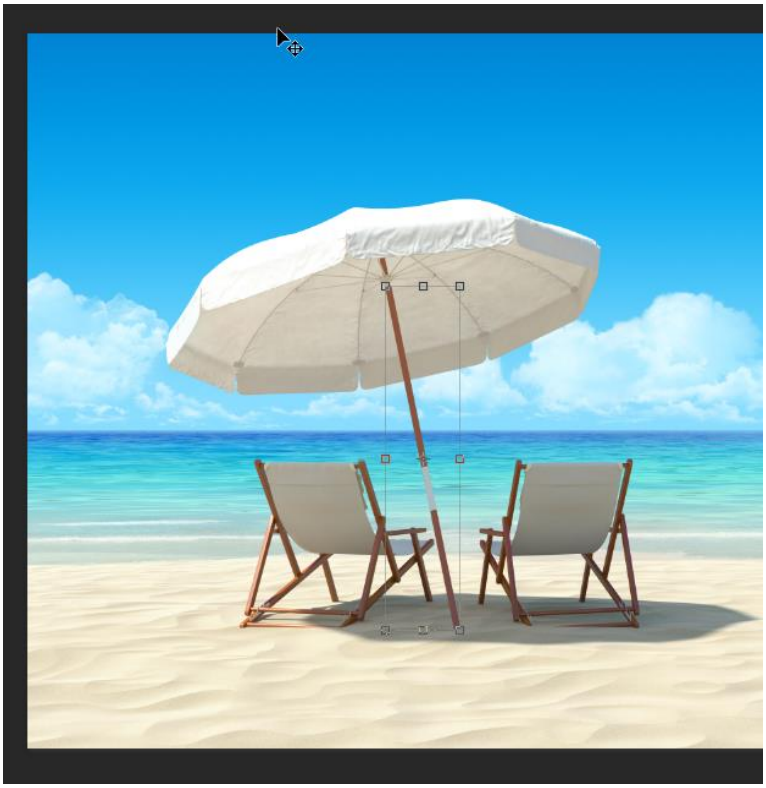
4. Vector Replacement

To make the umbrella pole exist, but not be part of the original image I took the beach image into Illustrator and traced the entire pole, the white pole center, and the white pole bottom as 3 paths. I then used a gradient on the path encapsulating the entire pole to simulate the pole's slight shadow. After layering the 3 paths together on top of the original pole the image looked like this.



However, the original image still had the original umbrella pole so I had to take that out as well. After exporting my vector object from Illustrator, which would be layered on later, I began removing the original pole in Photoshop. Using content-aware fill, and a decent amount of the stamp tool I made a somewhat seamless image without the umbrella pole. Fortunately, the troublesome spots are covered by the new vector pole anyway.

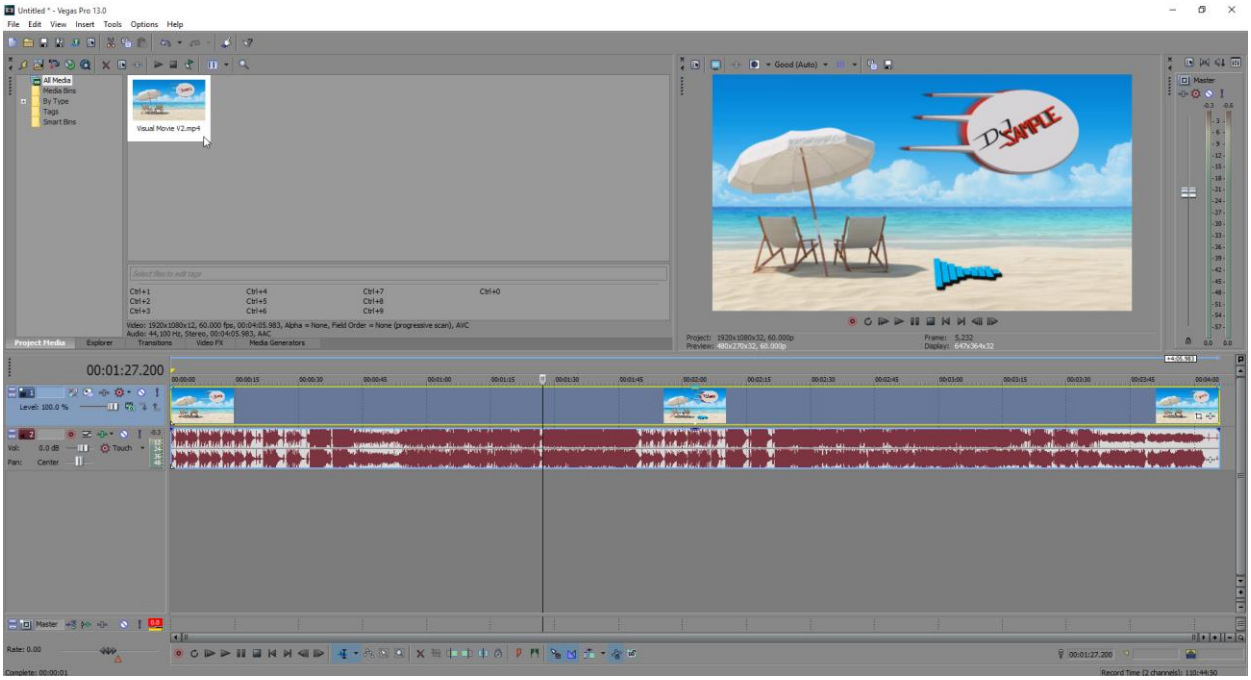




5. Exporting and sharing

Now that I had two separate layers for the beach and the pole, I put both into Magic with the horizon waveform in the middle. This gave me my final product.

All that was left to do was let Magic render the visuals as a movie and then cut that to a 5 second clip in Sony Vegas for an easy to transfer gif. The whole purpose of this is to show a “quick visual prototype” to a DJ instead of having them download a large video file or purchase Magic.



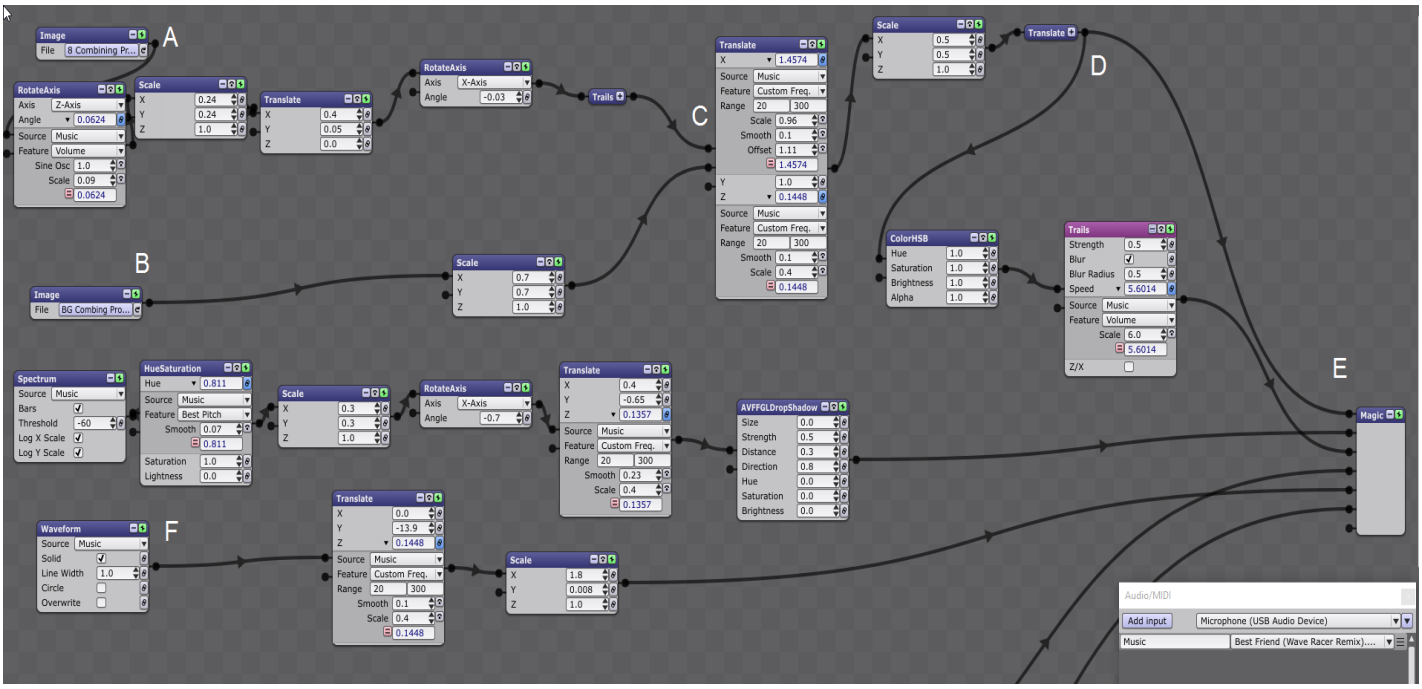
The final gif can be found here: https://gfycat.com/OldLoathsomeGalah

If you want to see the full video with the audio track look here:

https://www.youtube.com/watch?v=8SCDtfVm_5k

The song is called Miss You by Mura Masa for those wondering.

6. Extra Magic explanation for how this all works together



A: Effects chain for the text

B: Effects chain for the vector object behind the text

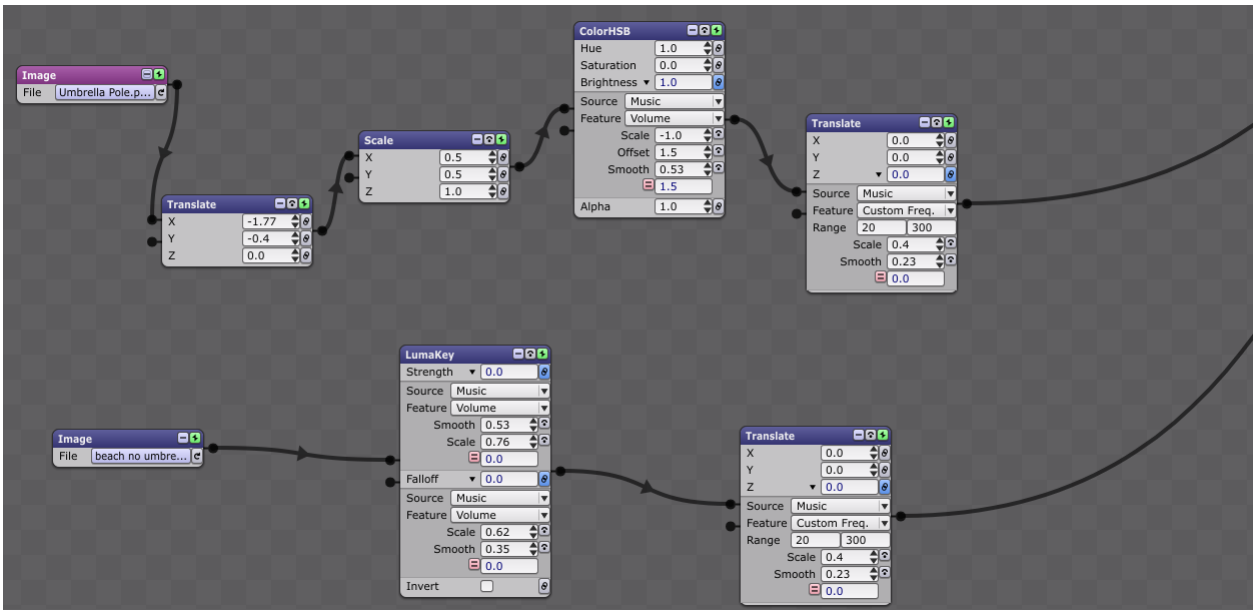
C: Here, I put both the text and the vector object into one “Translate” effect so that they both move together as one object. Every effect after this alters both sources now. It effectively makes them both into one source to render after this point.

D: A sub-chain breaking off for the trails that follow the text and its backing object. This creates two layers from the one output so that the trails can be colored without the object being colored as well. Without this the entire object and text would be red along with the trail.

E: This is the “Magic” module that does the rendering. There is an input for every effect chain that together act like layers similar to Photoshop. You can rearrange these inputs to reorder how the objects appear on the screen in the same way.

F: Effects chain for the waveform on the horizon

Below are the last two effect chains for the vector umbrella pole and the edited beach background. If someone wants to know anything specifically about one of the effects in the project feel free to ask me.



Thanks!