Color & Audio Accuracy in video

When making a movie file (animation, etc), it is important to assure that your colors are accurate and your audio is accurate.   If you want something to look blue, you don't want it to appear greenish-blue. And if you want a certain soft volume for part of your soundtrack, you don't want it to play back too loudly.

The way you assure this is by using:
SMPTE Colorbars
            and
1 khz audio tone

The colorbars are an image with specific, measurable colors.   Here is a low-resolution version of that image:

The audio tone is a specific (1 khz) frequency (pitch) of sound at a specific volume.

Colorbars

Most video programs can generate accurate Colorbars for you from within the program. For example, in Adobe After Effects, create your Composition, then use >File >Import >Placeholder. This "placeholder" image will be a full-resolution version of the image above. You can place it inot your composition.

I have included on my Pratt website on my website a downloadable .png file of this Colorbars image, at 1920x1080 resolution.

Audio Tone

Some programs also allow you to create the standard 1khz audio tone.   I don't know how to do this in AE. I have included on my Pratt website a downloadable .mp3 file of this 1khz audio tone.

Final Video with colorbars & audio tone

To make sure your video is played with the correct colors and audio, it is standard professional practice to place the following before your actual animation:

- 15 seconds of colorbars with 1 khz audio tone.
- 5 seconds of black, silent

Then your animation should start.

I have included on my Pratt website a downloadable movie file of bars and tone. I have also included the After Effects file that created that movie file.