10 things you need to know about the value of scopes as creative tools

1. When color correcting, you need high quality image definition and resolution.
   Specular highlights are the bright spots of light that appear on shiny objects when illuminated. Small specular highlights could easily be lost with the internal scopes built in to color correction software.

2. Internal scopes are just showing you what the image looks like inside the computer.
   The real proof of your efforts is the output. Tektronix scopes have the advantage of actually being on the output of your video card, showing you the actual output.

3. Another critical advantage of Tektronix scopes is that they’re easily configured and can show you the exact display or combination of displays that you want at the touch of a button.
   This flexibility gives you a complete picture of the image which is accessible simultaneously through different views. That’s important when you are trying to get through 1,000 grades in a day.

4. Tektronix Luma Qualified Vectorscope (LQV) display allows you to display a specific tonal range in the vectorscope, for example to see JUST the highlights or JUST the shadows.
   This makes it much easier to find a good white or black point, or to match what’s happening with color in the three distinct parts of the tonal range - shadows, midtones and highlights.

5. The Spearhead display allows you to perform color adjustments in terms of lightness, saturation and value.
   The spearhead and vectorscope combined provide a great three dimensional view of the color space.

6. Primary color correction usually starts with spreading out the tonal range to its fullest natural extent.
   Images that don’t have this “spread” appear flat or washed out. To be able to do this tonal spread well, you need a good RGB/YRGB parade display which allows you to see RGB contrast ratio.

7. One of the color grading tasks that require some real experience and skill is matching scenes.
   Capture the corrected “hero” image as a reference on your Tektronix scope. This is better than a still frame in your color correction software because the scope can now overlay the LIVE feed from your system on TOP of the captured still. You can simply see the captured image as a GOLD trace on the waveform display while the LIVE display is layered on top of it as a green trace. With the images superimposed, matching them is pretty simple.

8. When performing scene matching, you need maximum flexibility to view the video signal in a number of viewing combinations.
   Presets can save different SETTINGS for displays, including trace brightness, zooms, magnifications and other user settings.

9. Using secondaries to solve gamut issues is one of the powerful tools in the colorist’s toolbox for maintaining compliance without sacrificing the image.
   Bright up displays let you know exactly where in the image illegal colors occur so you can target them with secondary corrections.

10. Quality Control is the critical last step for your project. How can you determine if you have any gamut violations? Tektronix scopes let you audit your program and print out a time code accurate log at the end that will show where any errors have occurred. These can be anything from tape damage to illegal levels.

Click here to visit the Tektronix website to watch short video tutorials that illustrate these 10 topics.
Patented Gamut Displays for Effective Color Grading and Color Correction

**Diamond**
Allows you to determine which colors are contributing to Gamut errors in the RGB domain

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**Luma Qualified Vector (LQV)**
Allows you to see color cast in specific luma ranges (highs, lows, or mid-tones)

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**Spearhead**
Allows you to perform color adjustments in terms of lightness, saturation and value

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**Arrowhead**
Allows you to see if the signal is still legal when it is converted to a composite source