Step-by-step Instructions for accessing scopes

IKAN 5.5 inch: Waveform, Vectorscope, RGB Parade, False Color, Peaking
1) Connect monitor via SDI or HDMI port
2) Power on device and select source
3) Press function keys F1-F3 to apply monitor assist functions. These buttons are assignable through the main monitor configuration menu accessed via the menu scroll wheel

VILTROX 7 inch: False Color, Peaking, Exposure
1) Connect monitor via SDI or HDMI port
2) Power on the device and select source
3) Press the menu dial to access the menu
4) To access scopes go to **Menu > Function > False Color/Exposure/Peaking** On/Off

ATOMOS 4K 7 inch: Waveform, Vectorscope,RGB Parade, Peaking, False Color
1) Connect monitor/recorder via SDI or HDMI port
2) Power on the device and select source
3) Touch the waveform and monitor assist icon to reveal WFM functions

BLACKMAGIC DESIGN ULTRASCOPE: Waveform, Vectorscope, RGB Parade, Histogram

1) Install ultrascope software (included on USB drive) on your PC or Mac by following computer prompts
2) Connect ultrascope to your computer via USB 3.0 port
3) Connect ultrascope to the camera using SDI cable
4) Open software
5) Default view is full screen with 6 scopes displaying RGB parade, wave form vectorscope, histogram, audioscope and video preview

SONY 15 inch: No scopes available.

SONY PXW- FS7 MKII

The following tools are built into Sony FS7 and can be overlaid on the viewfinder: **waveform, vectorscope, historgram, zebra and peaking**

To generate a small scope reference window displayed on the bottom right of the **Viewfinder** go to:

Menu> VF > Video Signal Monitor > Setting > Waveform/Vector/Histogram

**zebra and peaking controls are also accessed through the VF menu

Monitor settings can be accessed through the **Video** menu.

To access control of external monitor settings go to
Menu > Video Menu > SDI1/SDI2/HDMI output on/off.

*It is here you can also select monitor LUTS and whether you want to superimpose menus and status or send a clean signal on the SDI and HDMI output


RED

The following tools are built in to RED cameras and can be overlaid on the viewfinder:
false color (exposure and video) zebra and peaking

To set peaking/zebra/exposure/video false color go to **Menu > Overlays> Tools >**

Alternately, to quickly toggle video false color on/off simply press the "2" button on the side of the viewfinder.

Waveform

A waveform monitor is a graph that charts the luminance (brightness) values of the entire image from left-to-right of your shot. The standard unit of measurement for brightness values is IRE, which goes from 0 (complete blackness) to 100 (complete white), so checking your X and Y values on your scope can tell you whether you're correctly (evenly) exposing your image without having to rely on your monitor, which may or may not be accurate.
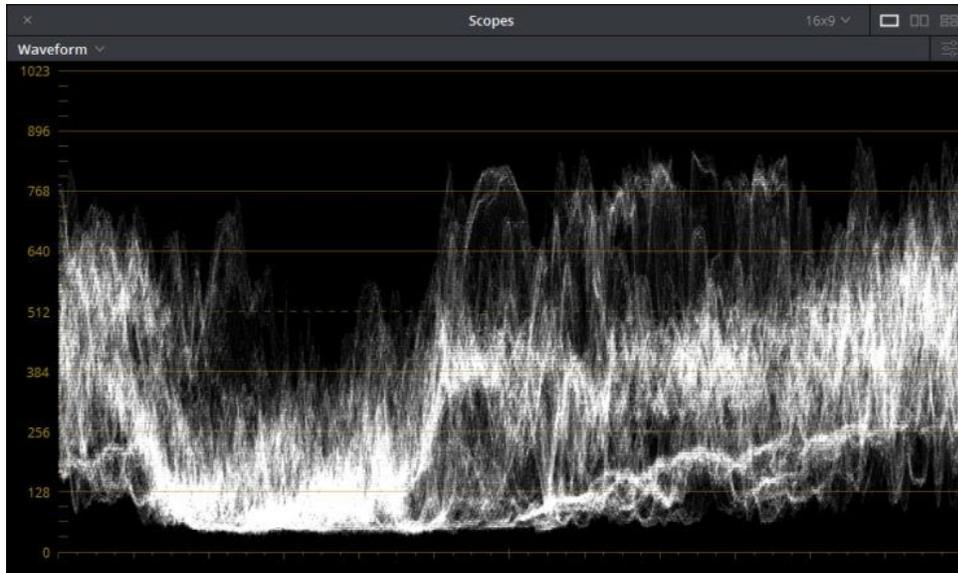

RGB Parade

The RGB Parade is essentially three separate waveforms for each of your red, green and blue channels. Like the single waveform, the RGB Parade shows the brightness levels of each of the color channels in pixel columns from left-to-right of your shot.
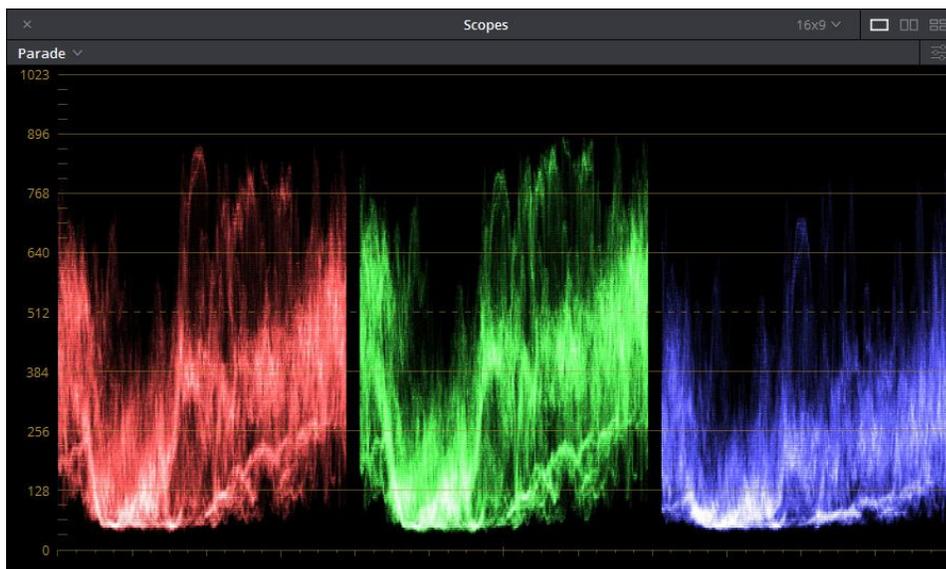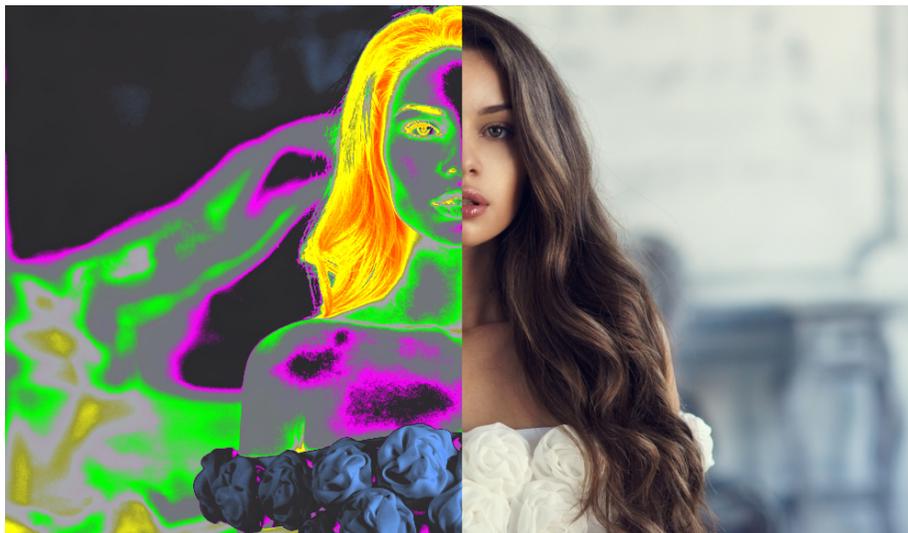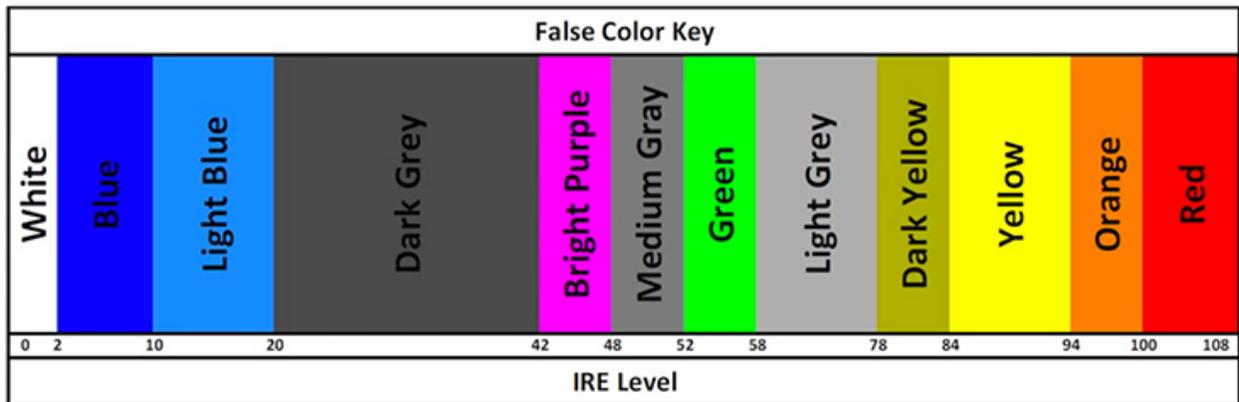
Vectorscope

A vectorscope is a visual representation of the chrominance (color signal).
They measure the data being captured by your camera's sensor, the values of which appear on a graph that looks like a color wheel. The vectorscope ignores brightness completely and only looks at the color of your shot. This is useful when you're using a reference chart like the x-rite color checker. Each of the six squares in the vectorscope matches up to the red, magenta, blue, cyan, green and yellow swatches found on the color checker. The line at the 11 o'clock position is where all skintones fall.
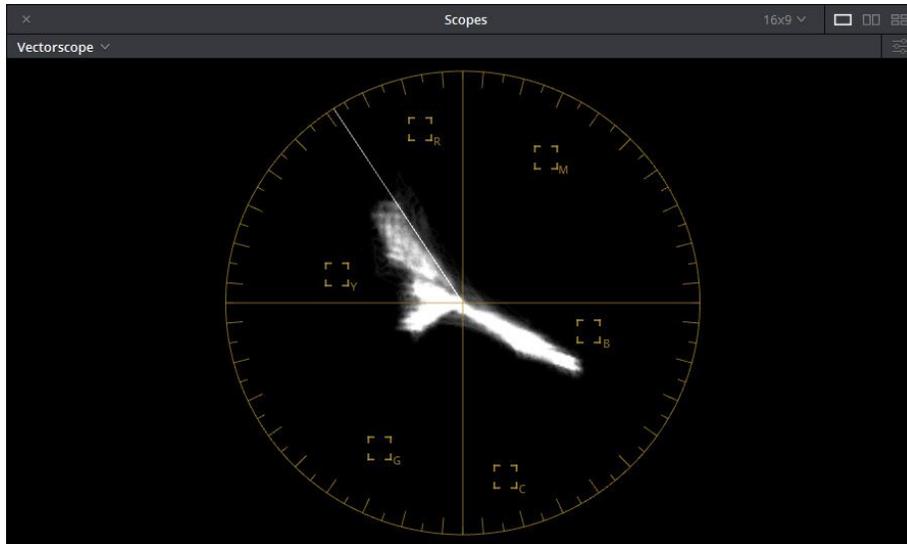
False Color

The concept of false color is quite simple: different luminance (brightness) values are represented by distinct colors to give you a clear understanding of the exposure levels of every part of your image. For instance, 0 IRE (your black level) may appear pink, whereas 100 IRE (your white level) will appear as red. This means that anything that shows as pink is clipped to black and anything red is clipped to white.

False Color Key

White	Blue	Light Blue	Dark Grey	Bright Purple	Medium Gray	Green	Light Grey	Dark Yellow	Yellow	Orange	Red

0	2	10	20	42	48	52	58	78	84	94	100	108

IRE Level

The key to exposing quickly and accurately using false color is to focus on skin tones first. Typically, skin tones should fall in the 70 IRE range, which will appear as light grey. Once you set your exposure so that your talent's skin tone appears grey, you know the image is well exposed — at least as far as the talent is concerned. From there, you can simply scan the frame for any areas that are over or underexposed and make lighting or framing adjustments accordingly.