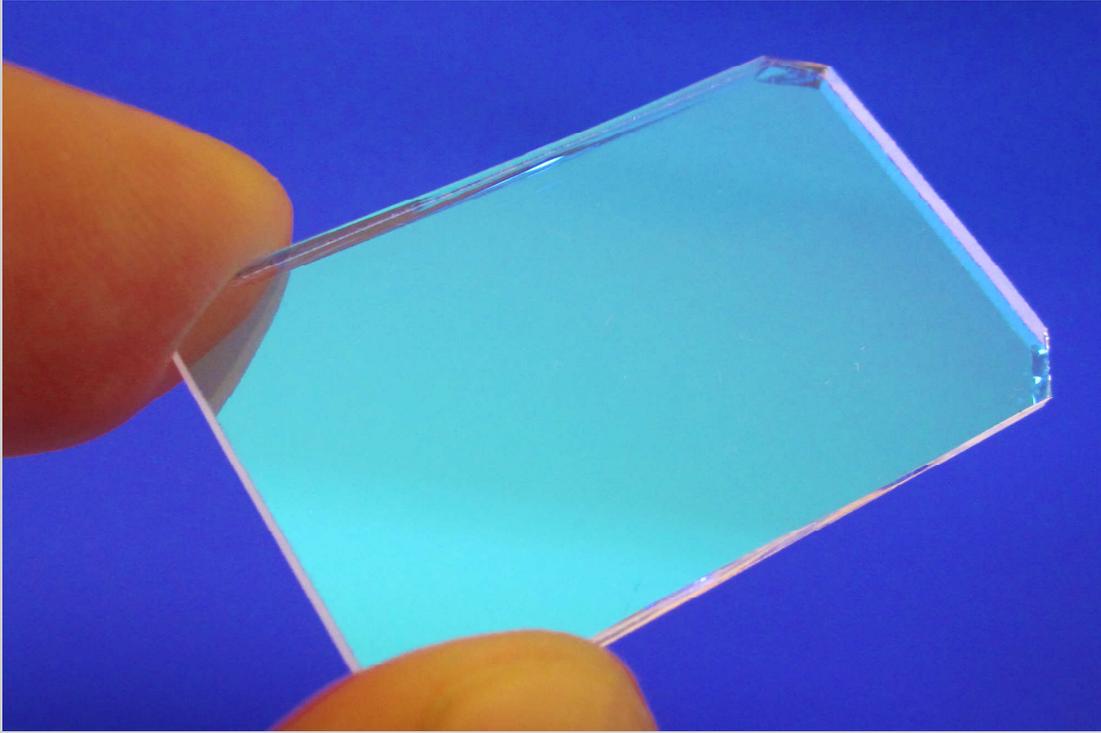


TRUEBLUE

Achtel Colour Science for RED DRAGON® and RED EPIC® Cameras*



Achtel's TrueBlue™ is a combination of camera modification and post workflow allowing RED cameras to discriminate blue colours.



RED Dragon Native Spectral Response (actual image)



RED Dragon TrueBlue™ Spectral Response (actual image)

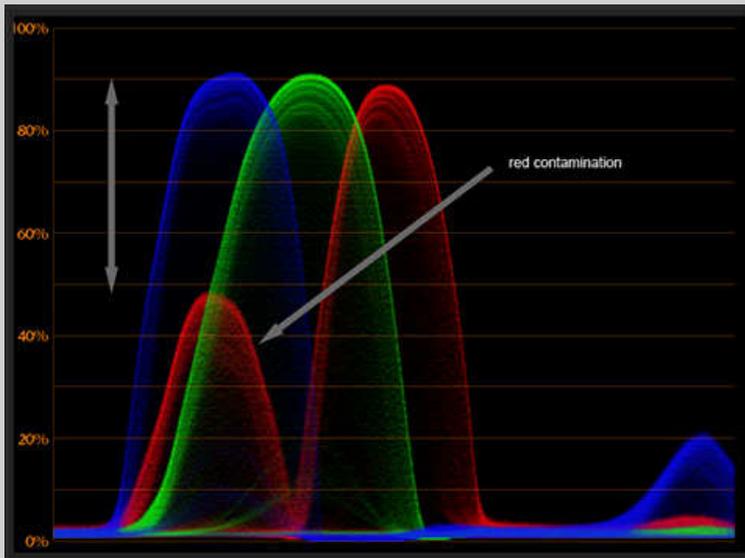
An unmodified camera is unable to reproduce blue colours. Instead, blue colours appear as magenta. This is because red photo-sites on the sensor are sensitive to not only red, but also to blue spectra of light. This phenomenon can not be corrected in post because of the severity of the magenta contamination, which leaves insufficient dynamic range in the blue channel (thin negative). There is simply not enough information to reproduce blue gradations, such as water or blue sky. As a result, blue skies and water appear magenta-grey instead of true blue.

TrueBlue™ solves this limitation.

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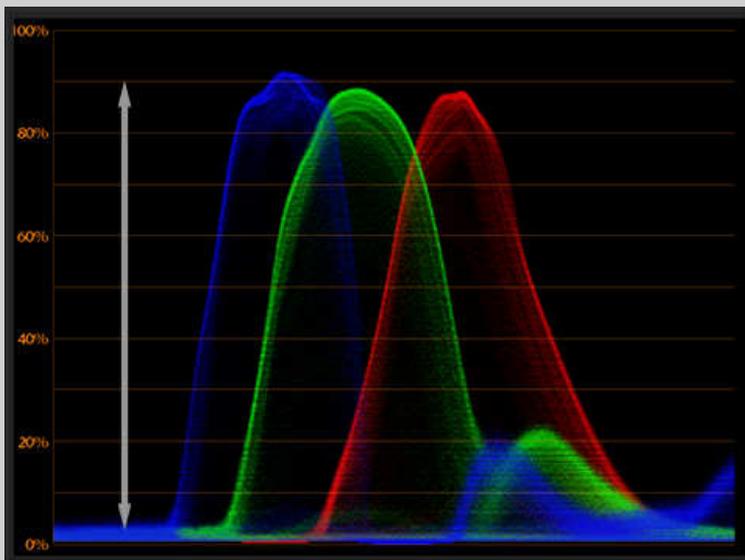
RED DRAGON® Sensor Native Spectral Response



RED Dragon® sensor quantum efficiency graph showing red response to blue light (contamination). The sensor can not discriminate blue for red. Red contamination accounts for as much as 50% of the blue signal.



RED Dragon® TrueBlue™ Sensor Spectral Response



TrueBlue™ technology sensor quantum efficiency graph showing superb colour discrimination in blue range. Full dynamic range is available in blue channel resulting in deep true blue colours and smooth gradients.



Achtel's TrueBlue™ is a sophisticated optical filter that significantly improves separation of blue colour from unintended red contamination. TrueBlue™ has minimal effect on other colours.

Cameras, such as RED Epic® MX and Dragon®, suffer from poor discrimination of blue colours and make it impossible to achieve "deep blue" skies or water, even with extensive post-processing. This is because the camera sees blue as magenta leaving insufficient colour separation to separate the two without causing posterization. TrueBlue™ is recommended for general cinematography as well as blue screen and can be used in most shooting conditions, particularly where cool colours need to be reproduced accurately.

For further information, visit www.achtel.com

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