

# HAWK V-LITE16

## High Speed Anamorphics for 16 mm

In 2010, Vantage designed a set of five entirely new lenses for 16 mm production. The lenses were designed from scratch and deliver ultra-high performance. The lenses have a 1.3x squeeze desirable for Super 16 and are available in the following focal lengths:

- Hawk V-Lite16 14mm/T1.5**
- Hawk V-Lite16 18mm/T1.5**
- Hawk V-Lite16 24mm/T1.5**
- Hawk V-Lite16 28mm/T1.5**
- Hawk V-Lite16 35mm/T1.5**
- Hawk V-Lite 45mm/T2.2**
- Hawk V-Lite 55mm/T2.2**
- Hawk V-Lite 65mm/T2.2**
- Hawk V-Lite 80mm/T2.2**
- Hawk V-Lite 110mm/T3**
- Hawk V-Lite 140mm/T3.5**

Simplicity and functionality govern the design of this series of small, lightweight Hawk V-Lite16 Anamorphics.

The challenge of producing a set of anamorphic 16 mm lenses was not an easy one. It had never been done before, and shooting spherical 16 mm always required a compromise between negative size and very short, flat lenses.

When filmmakers choose Hawk V-Lite16 Anamorphics, they no longer need to make this uncomfortable trade off. Proven lens designs did not lead to a compact S16 anamorphic lens with the full-blown quality that Vantage



Along with six of the regular Hawk V-Lite anamorphics, the 16mm set covers the wide range from 14 to 140mm.

required, so our experiments led to new design concepts and manufacturing procedures that allowed us to produce lenses small in size and grand in performance. The efforts led to the simple and elegant solution of using cylindrical lenses with extremely small radii to minimize the aerial distance between the lenses and then pack them tightly into a small, short housing.

After they were sure that such deeply curved lenses could be manufactured, the optical calculations were made. Hawk Chief Optical Scientist, Dr. Anatoly B. Agourok explains, "To achieve a minimum lens size, I did some intricate fine tuning. Not only did I optimize the shape of the optical elements, I also managed to reduce their number. Plus, I used ultra-thin glass with a high refractive index and set even stricter manufacturing tolerances than I usually do."

The result of these efforts is a range of strikingly compact, lightweight S16 anamorphic lenses. These lenses have been reduced to their very essence and are smaller than most spherical lenses on the market. Still, they offer the same stunning performance as all Hawk V-Plus Anamorphics.

Finally, DoPs and camera operators have the opportunity to work with small S16 lenses which are just as good as their 35mm counterparts.

**T1.5 - High Speed for Super 16 Anamorphic**  
Fully open, the Hawk V-Lite 16 1.3x provides 100% more light than 35mm anamorphics. This supports the use of low-grain film stock with medium ASA settings. Additionally, large geometric apertures create a shallow depth of field—a major characteristic of true anamorphic capturing.



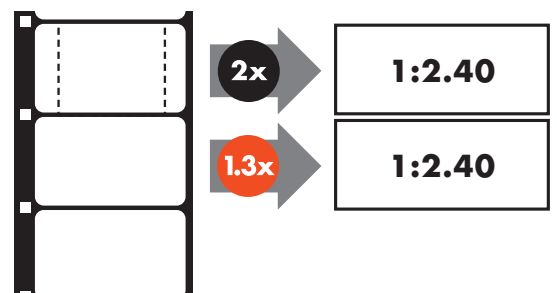
### The lenses are available in two versions:

#### Hawk V-Lite16 **2x** SQUEEZE for Normal 16

This format delivers classical anamorphic images with shallow depth of field. It can be combined with all existing Hawk Anamorphics.

#### Hawk V-Lite16 **1.3x** SQUEEZE for Super 16

This format uses the full S16 negative area. The emotional impact lies between anamorphic and spherical capturing.



Vantage has developed anamorphic viewfinders for Arriflex 416 cameras. The Vantage PSU video assist systems, have been upgraded to desqueeze these 1.3x images.