

THE IMMERSIVE EXPERIENCE

Lately, many Cinematographers have been interested in "getting in close" to their subjects and shooting into macro or beyond. For example, in advertising work, closing in gives the impression of "traveling" over a pizza, "exploring" its ingredients, or moving in on a micro-circuit. This has come to be called getting "immersive". But there is one problem which is especially true in cinematography: in the immersive, the camera becomes *intrusive*. To solve this, special lenses have been developed along *borescope* optical designs.

Simply put, a borescope uses multiple relays to elongate the distance between front lens and camera, "optically fooling" the camera into "thinking" that the lens is actually directly on it.

Up to now, to get immersive the best that could be done was to harness borescope design to the problem. But two limitations were present. First, the front lens was only *potentially* as good as it could be if *not* relayed, since image degradation occurred ever more with each successive relay. And, second, the characteristics of the front lens remained the same as any other lenses of similar focal length. That is, the borescope design did not *by itself* produce greater depth of field or resolution. In fact, borescope design was, is, and *remains a compromise* in order to be immersive. But what if a *new way* could achieve the immersive experience without the limitations of borescope design?

Infinity Photo-Optical has developed a new approach: Nelsonian® design. At first glance, a Nelsonian lens *appears* to be a borescope. That is because its construction is probe-like as well in order to facilitate access to subjects. But *there* all similarities end. For the Nelsonians are based on *microscope* designs inspired by "The British Abbe" E M Nelson in whose memory and honor they have been named.

There are *no* relays in a Nelsonian. There is no independent front lens because the entire optic functions as one harmonious, calculated system. As a result, by using a Nelsonian, you will not only experience immersiveness, you will obtain tremendous depth of field and sharpness reaching true equivalency with laboratory microscopes. Yet, they can be used for many other purposes. These lenses can be used for everything from general photography and cinematography to advanced special effects such as deep depth and forced perspective so easily that a story may now be told including these techniques. Where other means had previously required hours or days of setup time and expense that precluded incorporation in a shoot, it is now possible to do--likely in a single take. But, let's get back to the immersive...

Until now, you have been limited to "borescope immersiveness," so it may well be you have *yet* to *really* experience what being *truly immersive is*.

With a Nelsonian, you can keep two objects--let's say shoes--*simultaneously* in focus when 34 or more inches (85cm) apart. Yet, you can go to more than 16x over a full frame 35mm format.

Infinity now invites you to experience *true immersiveness for the first time*. Nelsonian immersiveness.

THE NELSONIANS

The amazing Nelsonians are available for photo/cine in two configurations and several models.

InfiniProbe™ TS-160

- ROBUSTO™
- ROBUSTO-Lite™

A full *system* backed by a complete line of focal lengths, macro and micro objectives. Complemented by user-interchangeable prism fronts for 90 and 45 degree capture. There is *nothing* like it.

Full details:

<https://www.infinity-usa.com/robusto-series/robusto-ts-160-choose/>

Instruction Manual:

<https://www.infinity-usa.com/wp-content/uploads/InfiniProbe-TS-160-OEM-Handbook-030922.pdf>

MikroMak™

A Series of PRIMES (125mm, 90mm, 70mm, 50mm and 40/25mm (with Expander). All are Macro and the 125, 90 and 70 magnify to 5x or more.

Full details:

<https://www.infinity-usa.com/mikromak/>

Instruction Manual:

<https://www.infinity-usa.com/wp-content/uploads/MikroMak-OEM-Handbook-090321-1.pdf>