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KO | BRINGING QUALITY INTO FOCUS

Homogenizing Rods for Electrical Instruments

Knight Optical can offer [Custom Homogenizing Rods](#) for use within [Electrical Instruments](#).

Electrical instruments use backlight displays to help illuminate and evenly distribute the light source. They can be used as mixers, which is when you want to mix colours from multi-colour LEDs together.

The light source will enter a light pipe at a variety of incident angles, which is designed to utilise its total internal reflection to help transmit light from the entrance of the light pipe to the exit. The material's refractive index is the only factor which affects the light pipe's critical angle; this defines the angle of acceptance at which the total internal reflection will occur.

Typical specs:

Material:	BK7 (or equivalent), UV Fused Silica or Other Optical Glass
Length Tolerance:	+/- 0.3mm
Aperture Tolerance:	+/-0.1mm
Surface Quality:	<60-40 Scratch/Dig
Coating:	Optical

All our Homogenizing Rods are fully inspected on their quality in our ISO 9001-certified, state-of-the-art Metrology laboratory, using our Trioptic's PrismMaster, and Starrett AV300 Video Imaging System. This allows us to work to the highest [QA standards](#) and meet the tolerance specifications on these **precision components**.

[Contact our technical sales team](#) to discover how Knight Optical's high-quality Homogenizing Rod and superior service can improve your instrumentation and supply chain experience.

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