

Frequently Asked Questions

about the accuracy of the Klein Convergence Gauge



How accurate is my Klein Convergence Gauge? We estimate the accuracy to be +/- .05mm under normal use for the average user.

It has been noticed that some people get more consistent measurements than other people. Why is that? At Tektronix we tested our product and the people using it. Accuracy was +/- .05 as a whole, but about a third of the group could get much better than that. We cannot explain why this is, but final authority in quality control rested with the more accurate users.

Is there any way I can get better results? Yes. In using the gauge, the “brightness centers” of the lines need to be lined up by the user rotating the knobs on the gauge. In practice, it can be difficult to tell where the brightness centers are with the human eye, so we recommend lining up the beam edges. If one beam is wider, the narrower should be centered within the edges of the wider one when taking a reading.

What if I just line up the dots? No. It is very important not to line up the dots (or stripes on Trinitron tubes). The goal is to determine where the beam edges are, and line up one beam with another, disregarding the pattern of phosphor dots or stripes.

Is recalibration really necessary? Yes. To keep the gauge accurate and in complete working order, a recalibration is necessary. We recommend every one to two years depending on use. We also provide a certificate of calibration for ISO9000 compliance.

It seems everyone has the Klein Gauge. How did it get so popular? We are very proud that our CM series of convergence gauges have been adopted by more monitor manufacturers and repair depots worldwide than any other convergence error device. It is an easy to use, inexpensive precision instrument, and will deliver years of service.