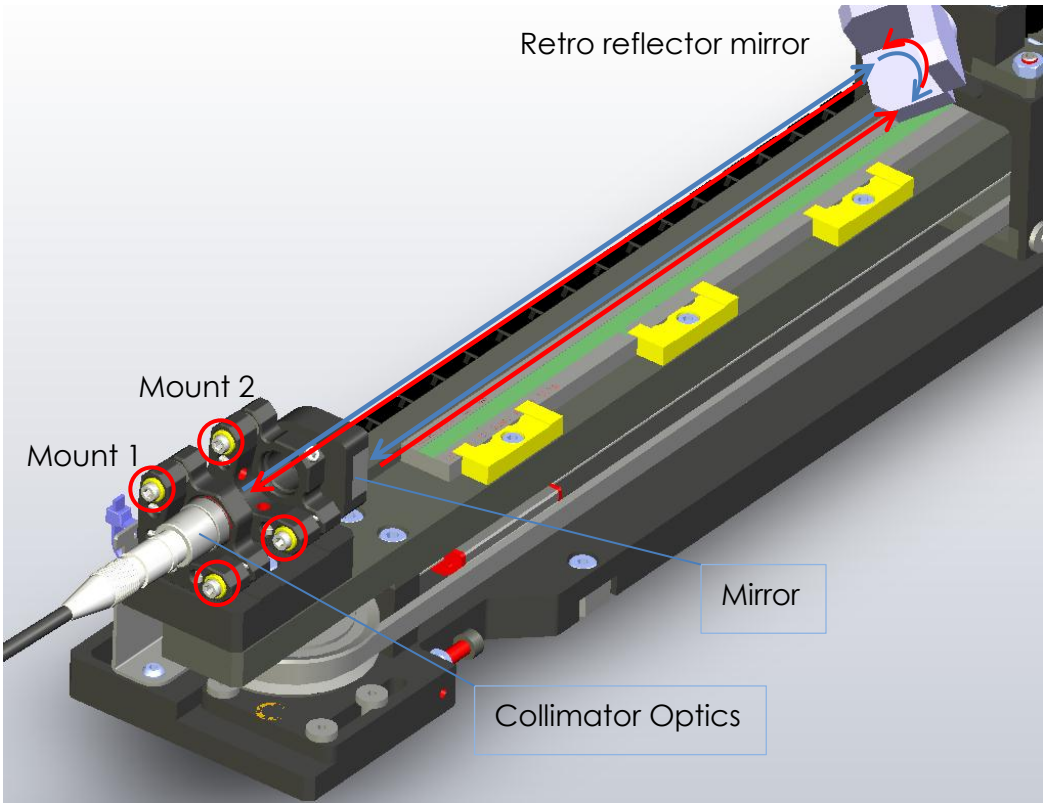
OptiSurf Delay Line Alignment

1. Start the OptiSurf Professional software. Leave all electrical and optical wires connected and carefully remove the cover of the OptiSurf delay line. Be careful not to damage the small fiber.



2. With no sample in the measurement arm open the "Intensity Adjuster" and note the value (typical: 0.3 %).
3. Block the beam in the delay line and check if the intensity value changes.
4. Use an Allen key to align mount 1 (either x or y screw) in that way that the intensity increases. Turn the screws of the mount by not more than 180°. Ideally reach an intensity value of about 1% which is sufficient to get a high enough signal for the measurement.
5. If the intensity did not increase switch on the alignment laser and use both screws of mount 1 to align the beam (blue) perpendicular to the linear axis. Tape a piece of paper around the edges of the retro reflector to mark a spot as reference. Drive the retro reflector by clicking the "Measure" button in the OptiSurf software.
6. Now align mount 2 in that way that the back reflection is directed exactly into the collimator optics. Once the beam is close enough the signal can be viewed via the "intensity adjuster" in the software. Align mount 2 to give the maximum intensity.