



Sparrow Cylindrical Lens Adjusting Guide

The optical correction set includes two lenses, a negative -4mm focal length diverging lens and a positive +22mm focal length converging lens. The converging lens is a plano convex lens while the diverging lens is a plano concave lens.

To mount and adjust these lenses you need a 1.5mm hex screwdriver or Allen wrench and a 13mm wrench or a pair of pliers.

First open the cover of your sparrow module. Turn the laser module on at a low power setting and set the diverging lens into the holder closest to the laser diode.

Make sure the rotation of the lens matches that of your diode. This means that the curve of the lens needs to be horizontal.

Use the delivered set-screw to lightly hold the lens in place.

Adjust the rotation of the lens with your pliers or your wrench. Make sure that the beam profile looks straight.

Add the converging lens to the mount farthest away from the diode. Again, make sure that the rotation matches your diode, approximately horizontal.

Use the set-screw to lightly hold the lens in place.

Adjust the rotation of the lens to produce a straight beam. Vary the distance of the lenses to get the best far field beam size.

If you are satisfied with the results, tighten the set-screws fully without over tightening.

As the last step add the cover to the sparrow module to close it up and protect the lenses from dust.