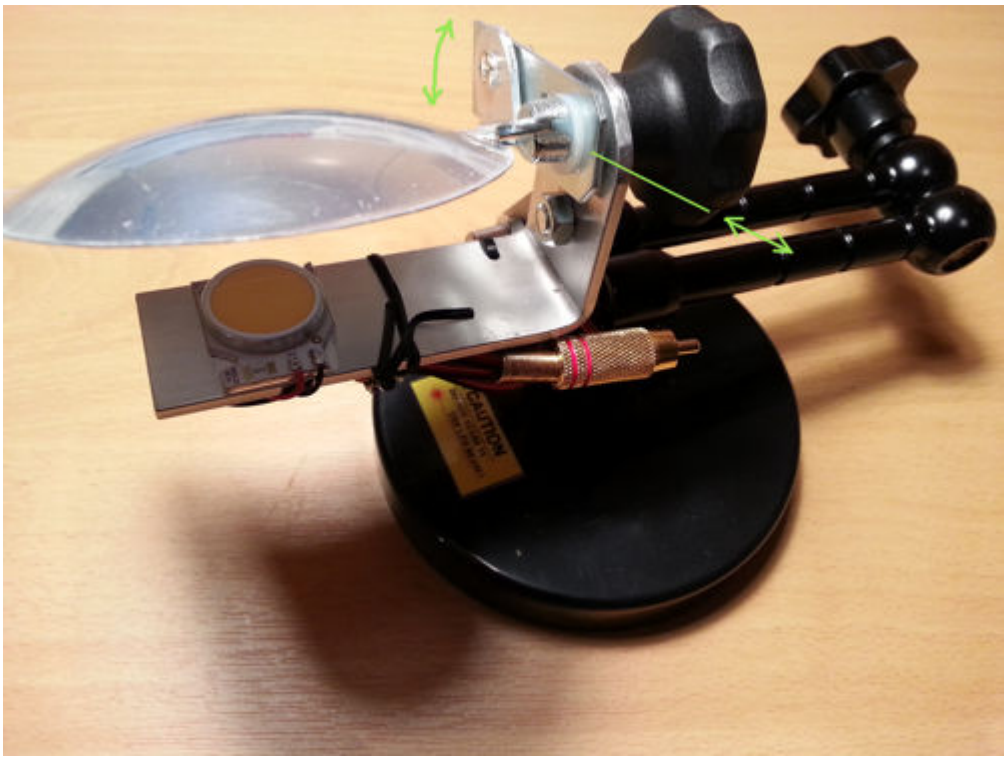
Manual for special LED system, for ball illumination

TDKK
Technische Dienst Koekange



Main priciple,
The curving of the ball makes every projection smaller.
By starting with a rather large Light Emitting Surface (LES) which projects its light in a concave mirror, the light output is a wide homogeneous beam. When projected on a ball, this still has an acceptable diameter. Much larger than most other solutions, and without diffusers, so the hard direct light radiation is rather rich in contrast.

Be aware that this high power LED (which is factory set to a low output) produces a lot of light, wich can be harmfull to your eyes, never look straight in the beam of the LED

Setting up the unit.
For packaging reasons is the mirror unit disconnected from the magic arm / base, at the end of the arm is a silver nut, remove this, slide the morror unit on the bolt on the end or the magic arm and fix the silver nut again, fix tight. (use two spanners)
loosening the black knob in the joint of the magic arm makes the arm free in movement in all directions, now you can find the ideal position of the LED beam, and tighten the knob on the magic arm to lock this position.

Adjusting the mirror is a bit tricky to do, there are a queit a few movements possible, every movement has influence on the size and shape of the beam. For this reason the mirror is already in a preset position.

TIP if you for any reason should readjust the mirror, take the whole system from under the microscope, to a free position on the workbench, and try to adjust the mirror in such a way that it projects a narrow beam on the workbench, fix this position with the wingnut / knob, and reposition the unit under the microscope.
Sliding the base to or from the object can help to make an equally lit bright illuminated circel on the ball.

Regulator buttons ON and OFF and illumination level.
Connectors mains cable and plug for LED unit just plug and play