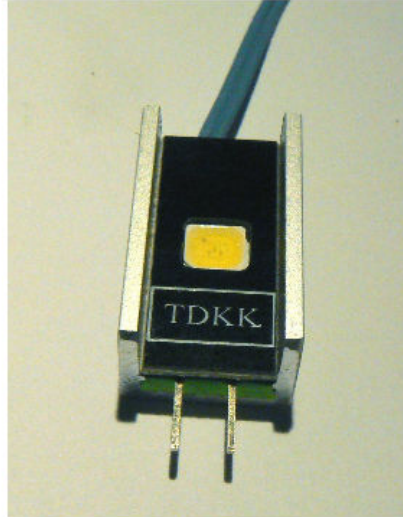


TOP LED and Small controller

Developed to solve microscope light problems

There is often a problem to get a new bulb for a microscope or there's a broken electronics that can't be replaced.....
 TDKK has a rather unique solution, the "TOP LED "



The TOP LED has a G4 bi pin base , like the halogen..... only there is no electrical connection between the LED and the pins.
 The pins are only there to mount the LED in the halogen base of the microscope.
 The outer dimensions of the LED resemble that of the halogen bulb

When the LED is mounted at the location of the halogenbulb, the thin lead at the top of the LED, which is the "powercord", can easily be guided through an opening, somewhere in the bottom of the microscope. (in some cases you have to grind a small opening for the lead)



The thin lead at the top of the LED...

Is smooth so there is no mechanical stress to the LED, the small lead converts into a normal size cable, that ends with a connecting plug that can be plugged into the small controller.

Technical info	
Connector	G4
Filament hight.....	19 mm
Tension.....	5 volt
Current.....	150 mA
Replaces a	20 watt halogen
Light power.....	> 20 watt
Light color.....	4000K
Emitter	Cree MX3
CE	on power plug
Temperature	< 50 degr C
Life cycle.....	50.000 Hr
Cable length.....	0,8 mtr
Fuse.....	1 Amp
Frequency PWM....	3000 Hz
Control range.....	5- 100%
On Off switch.....	yes
Connectorplug.....	Cinch
Warranty	12 mnths
Origen	Netherlands





Small controller

This small controller is build around the popular TDKK 3000Hz microscope PWM regulator.



Power input.

Normally the small controller comes with a 5 volt powerplug. On request the controller can be delivered with an USB cable, so you can buy a local USB powerplug. You could also drive the LED with power from the USB connection of a laptop or solar panel