



USER MANUAL

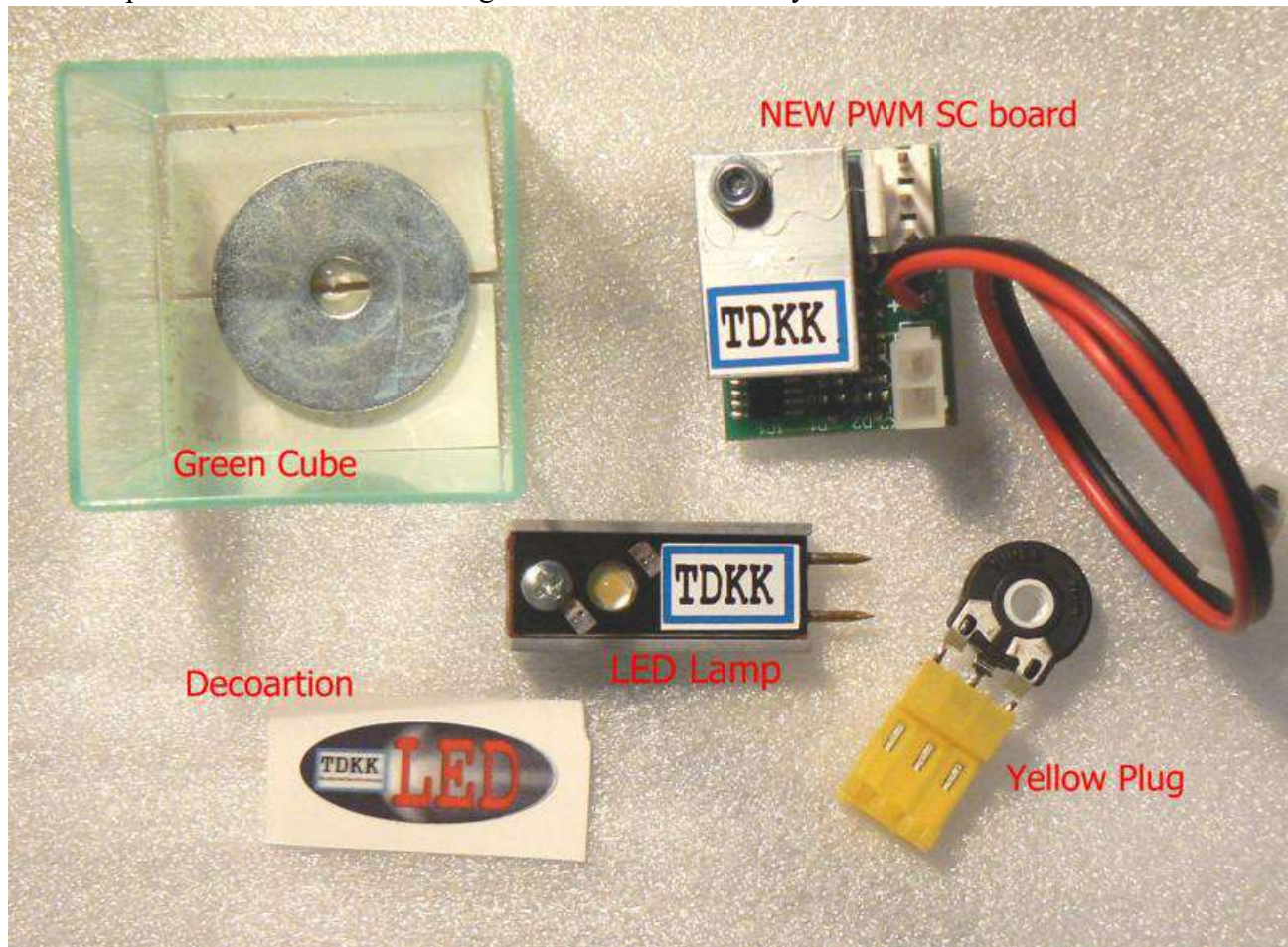


Mounting- and technical description for the LED lamp DM2000

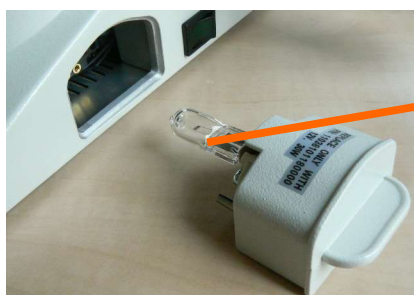
LED Lamp DM2000

The LED Lamp DM 2000 is a set of a few components.

Alas it's not enough to replace only the lamp, but we have to put in a new regulator unit inside the microscope. Because of a clever design this can be done easily.



Take the power cord out of the microscope

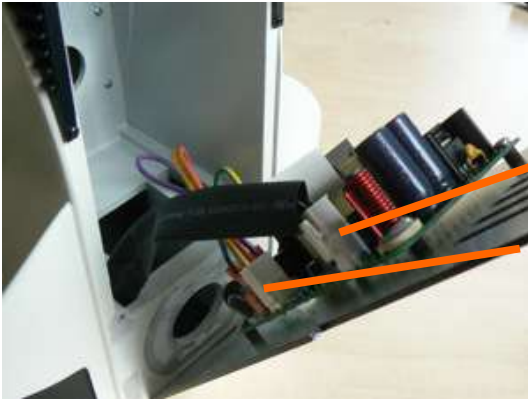


Take out the lampholder from the side of the microscope base, take out the halogen bulb and put in the LED Lamp at the vacant position. (sticker side up) fit the lampholder again.



Turn the microscope around so you face the back of it, at all four corners of the back is a cross slid screw, please take these out using a fitting screwdriver.





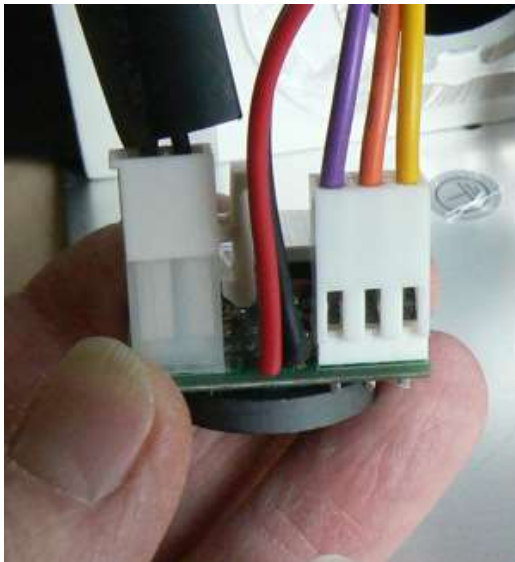
Now you can carefully open the rear of the microscope which is still connected with a few cables to the electronics board.

Here you see two obvious cables that are connected to the board, the plug with 3 wires is the first we take out of its socket (pull up).



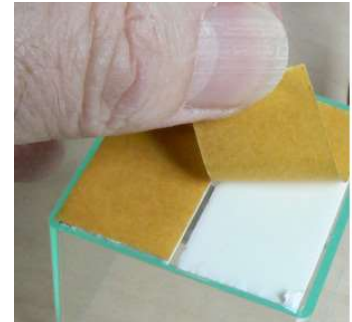
At this socket we put the new **YELLOW plug**. (do not change the setting of the potentiometer on top!)

The other cable has two black leads, (sometimes it is wrapped in a sleeve) the plug has a clip at the side, squeeze the clip and pull the plug upwards from the socket. At this socket we put the **red/black cable of the regulator**.



Next to the metal of the regulator you find two new sockets where you can fit both cables that you just have taken out of the microscope board

Also in the set of components of the LED lamp is a bright green cube, it has sticky tape at the bottom.



Please fix this cube inside in the back of the microscope, (here is a little “parking space”)



Take the regulator, which has now three cables, lead the regulator with these cables in a slow curve into the green cube. By means of a magnet, the regulator will stick at the bottom. (if needed you can use the tie-rop to hold the cables, loose fit)



Swing the back plate of the microscope back to its original position, mind that the cables don't interfere with the mechanics, and put in the 4 screws and screw tight

You can now rotate the microscope to its working position, put in the power cord again, and you can use the microscope powered by the LED Lamp.

All microscope components have the same functionality as before.

In case you need to use the microscope with halogen bulb again, take out the regulator first (reverse sequence, you can leave the green cube inside)

DO NOT USE THE NEW LED REGULATOR WITH HALOGEN BULBS!

(there is a fuse on the board that will blow)

Paste the decoration sticker in a visible place on the body of the microscope to indicate the presence of the LED Lamp.(and regulator)



***NEVER LOOK STRAIGHT INTO THE LIGHT BEAM OF A
POWER LED***

(chance on eye damage)

The LED lamp DM 2000 is regulated with PWM (Pulse Width Modulation).
Set on a frequency of about 3 KHz (2,7-3,5).

This could give some low frequency harmonic interference (AM radio)

Keep about ± 1 meter distance from receivers or high sensitive equipment

The LED lamp DM 2000 takes approx. 8 volt from the microscope supply.

The LED lamp DM 2000 is set to a maximum current of 260 mA (≈ 2 Watt).

The LED lamp DM 2000 may only be used in a DM 2000 microscope.

The LED lamp DM 2000 can reach a temperature of 80 degrees C (avoid maximum levels)

TDKK gives 1 year warranty on this LED product 01-01-20.. serialnumber ...

TDKK is registered at the chamber of commerce in Meppel under nr 04087287

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