

# LE.5211-LED

cold light source



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## 1.0 Introduction

With the purchase of the cold light source LE.5211-LED you have chosen a quality product. The LE.5211-LED cold light source is developed for use in education, laboratories and industry. The LE.5211-LED is extremely useful for photomicrography and industrial applications. The maintenance requirement is limited when using the LE.5211-LED in a decent manner

This manual describes the construction, how to use the cold light source and the maintenance of it

## 2.0 Construction of the cold light source LE.5211-LED

The names of the below parts are indicated in the picture:

- A.** Optional twin-arm light conductor with focusing heads (LE.5214 with LE.5222/ LE.5224)
- B.** Set-screw to lock light conductor
- C.** Connector for light conductor (Ø 12 mm)
- D.** Safety on/off switch (on the back)
- E.** Mains cable connector with built-in fuse holder (on the back)
- F.** Cover (slide backwards to remove cover)
- G.** On/Off switch with light intensity regulator
- H.** Grip (left and right side)



### 3.0 Functions of the cold light source

The cold light source LE.5211-LED can be used for any application where heat on the illuminated object needs to be eliminated. To move the instrument, pick it up by using the grips on both sides (H)

#### 3.1 Technical specifications

<b>Voltage primary</b>	100V-240V 50/60Hz auto switching
<b>Color temp.</b>	Appr. 6500 Kelvin
<b>LED</b>	High power LED source
<b>Fuse</b>	250 Volt, 2 A slow, 20x5 mm

### 4.0 Preparing the cold light source for use



**Warning:**

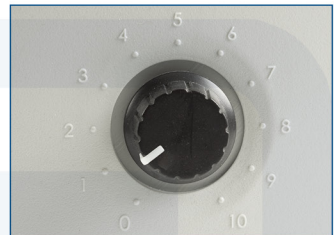
The air inlets on the front bottom, as well as the air outlets on the back should never be covered

- Insert a light conductor into the connector (ill. A). Make sure one of the flat sides of the conductor is on the left (where the tightening screw is), to prevent slipping. The light conductor should always be fully inserted
- Now tighten the set-screw (B) to secure the light conductors position. The LE.5211-LED is now ready to be used



On image C a focusing head for light conductor is used (LE.5222). The focusing head can be combined with either an aspherical focusing lens (LE.5224) or an iris diaphragm (LE.5228)

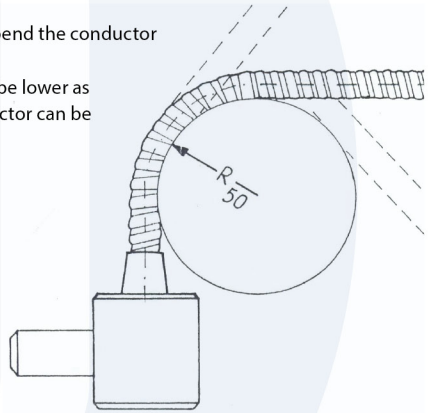
- Connect the cable to the mains supply, and turn the light intensity regulation knob (G) to the left to digit 1. The bulb will light up and the fan will start running. By turning the light intensity regulator on a scale of 0 – 10 to the right, the light intensity increase. At the back of the unit there is a safety on/off switch (F)
- After use simply shut the instrument down on digit 0. If the instrument should be moved after use, it is recommended to put the light intensity regulator as low as possible, and leave it for a few minutes in order to cool down



## 5.0 Using the light conductors

The self-sustaining and flexible light conductors are equipped with glass-fibres for maximum conductivity of light, and should be treated as follows:

- Carefully point the conductor towards the object and only bend the conductor in one direction
- The bending radius "R" of the light conductor should never be lower as 50 mm, otherwise the metal construction of the light conductor can be damaged. This can cause instability and inflexibility



## 6.0 Maintenance and cleaning

The instrument can easily be cleaned with a soft cloth



### **Warning:**

Always pull the plug from the mains socket first and let the instrument cool down for a few minutes

### 6.1 Replacing the fuse

To change the fuse, please follow these procedures below:

- Remove the power cord from the back of the LE.5211
- Find the fuse compartment, which has a fuse image. It is located next to the power connector
- Remove the fuse compartment. To do so, insert a flat head screw driver in between the metal power tines and gently pry the fuse compartment loose
- Insert the new fuse into the compartment, and then replace the fuse compartment cover
- Power up the LE.5211 and test

