

**USERS MANUAL**  
for  
**COLD LIGHT SOURCE**  
**FUTURO LED**  
152386.0100



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**Brütsch-Rüeegg**  
**Tools**

## **1.0 Introduction**

With your purchase of the FUTURO cold light source 152386.0100 you have chosen a quality product. The cold light source is developed for use in education, laboratories and industry. It is extremely useful for photo-micrography and industrial applications

The maintenance requirement is limited when using the cold light source in a decent manner.

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

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## **3.0 Construction of the cold light source**

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

- A) Twin-arm light conductor (focusing heads and aspherical lenses optional)
- B) Set-screw to lock lightconductor (not visible)
- C) Connector for light conductor
- D) Grip (left and right side)
- E) Mains cable connector with built-in fuse holder (back side)
- F) On/Off switch with light intensity regulator
- G) Cover



### **Optional accessories:**

Focusing heads for light conductor	LE.5222 (2x)
Aspherical lenses for light conductor	LE.5224 (2x)

#### **4.0 Functions of the cold light source**

The FUTURO cold light source can be used for any application where heat on the object to be illuminated should be eliminated. To move the instrument, pick it up by using the grips on both sides.

#### **4.1 Technical specifications**

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

#### **5.0 Preparing the cold light source for use**

At the back of the unit there is a safety on/off switch

#### **Warning:**



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

Insert a light conductor into the connector (C) in such a way that the flat side of the connector points to the left, in the direction of the set-screw (B). The light conductor should always be fully inserted. Now tighten the set-screw (B) to secure the light conductor's position.

The FUTURO cold light source is now ready to be used. Connect the cable to the mains supply, and turn the light intensity regulation knob (F) to the right as to the point where the arrow points to digit 1. The bulb will light up and the fan will start running. By turning the light intensity regulator with a scale of 0 – 10 to the right, the light intensity is increased. For normal use we recommend the light intensity 9, this has a positive effect on the life-time of the halogen bulb..

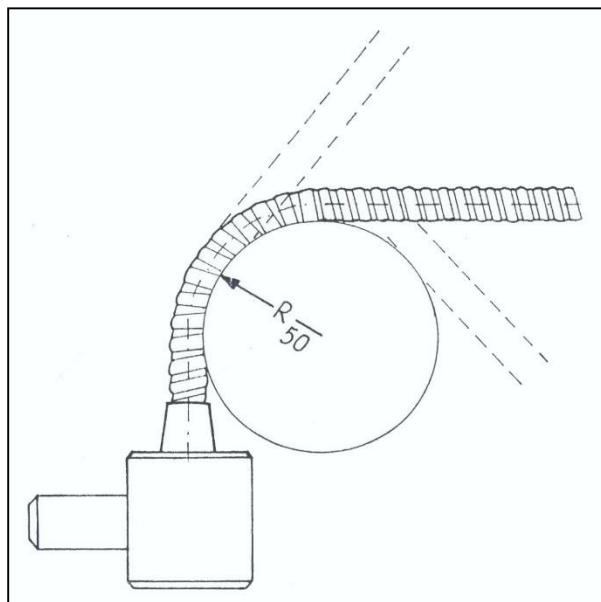
After use simply shut the instrument down on digit 0. If the instrument should be moved after use, it is recommended to put the light intensity regulator as low as possible, and leave it for a few minutes in order to cool down

## 6.0 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. because otherwise the metal construction of the light conductor can be damaged. This can cause instability and inflexibility.



## 7.0 Maintenance and cleaning

After use the instrument should be cooled down. The instrument can easily be cleaned with a soft cloth.

**Warning:** Before cleaning always pull the plug from the mains socket first.



## 8.0 Spare parts / optional accessories

### Spare part

AE.5212 Set of 10 fuses 250V-1,25 A – Slow.

### Optional accessories

LE.5222 Focusing heads (2x)  
LE.5224 Aspherical lenses (2x)

### Repairs

Should a repair of your cold light source be necessary, please contact our Servicecenter  
⇒ [Servicecenter@brw.ch](mailto:Servicecenter@brw.ch)

### **Caution**

Electronical parts are just to be repaired or exchanged by authorised personal.  
Any liability is declined when trying to repair defects yourselves.

