

# Operating instructions

***kobold***  
by **bron**  
***Lumax***

# Operating instructions

# ***kobold***

## **Lumax**

**Ballast units**

**EB 2x20/40**

**EB 4x20/40**

**Light banks**

**SB 12/22**

**SB 14/24**

## **Before use**

Please read all the information contained in these operating instructions carefully. They contain important details on the use, safety and maintenance of the lighting equipment. Keep these operating instructions in a safe place and pass them on to further users if necessary.  
Observe the safety instructions.

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## General safety instructions

When using your lighting equipment, basic safety precautions should always be followed including the following:

1. Read and understand all instructions before using.
2. Close supervision is necessary when any lamp is used by or near children. Do not leave lamp unattended while in use.
3. Care must be taken, as burns can occur from touching hot parts.
4. Do not operate lamp with damaged cable or if the lamp has been dropped or damaged – until it has been examined by a qualified serviceperson.
5. Position the cable so that it will not be tripped over, pulled, or make contact with hot surfaces.
6. If an extension cable is necessary, a cable with a current rating at least equal to that of the appliance should be used. Cables rated for less amperage than the appliance may overheat.
7. To reduce the risk of electric shock, never open this unit: take it to a qualified serviceperson when service or repair work is required. Incorrect reassembly can cause electric shock when the equipment is subsequently used.
8. The use of an accessory attachment not recommended by the manufacturer may cause a risk of fire, electric shock, or injury to persons.
9. Always unplug ballast unit and lamp before cleaning or servicing and when not in use. Never jerk cable to pull plug from socket. Grasp plug and pull to disconnect.
10. Lumax ballast units and light banks are **not** compatible with products of other manufacturers. Lumax light banks or ballast units **must** only be used with *kobold* products.

## **Attention: Read before starting up**

- For safety reasons the ballast units EB 2x20/40 und 2x20/40 may only be operated with an earthed mains (AC-line) plug.
- These appliances are designed for use indoors and out. Though they have to be kept dry.
- To reduce the risk of electric shock, do not immerse the ballast units and light banks in water or other liquids.
- Before replacing fuses or fluorescent tubes, disconnect the ballast unit from power supply.
- The equipment is not suitable for use in explosion-hazard areas.

## **1. Starting up**

Equip the light bank with tubes.

Connect the *kobold* lamp cable to the light bank and the ballast unit.

Screw the mains cable onto the ballast unit. Ensure that the cap nuts are fixed tightly.

Connect the ballast unit to the earthed mains supply. The appliances are designed for mains voltages from 200 up to 240 V or from 100 up to 120 V (version 120 V).

Set the switch lever for power selection to the corresponding position (SB 12, SB 14: 20 W ; SB 22, SB 24: 40 W)

Turn the dimmer to the right as far as it will go (max.).

Switch on the mains switch (on/off); the tubes need a heat-up period of a few minutes (undimmed, i.e. on full power).

## **2. Power regulation**

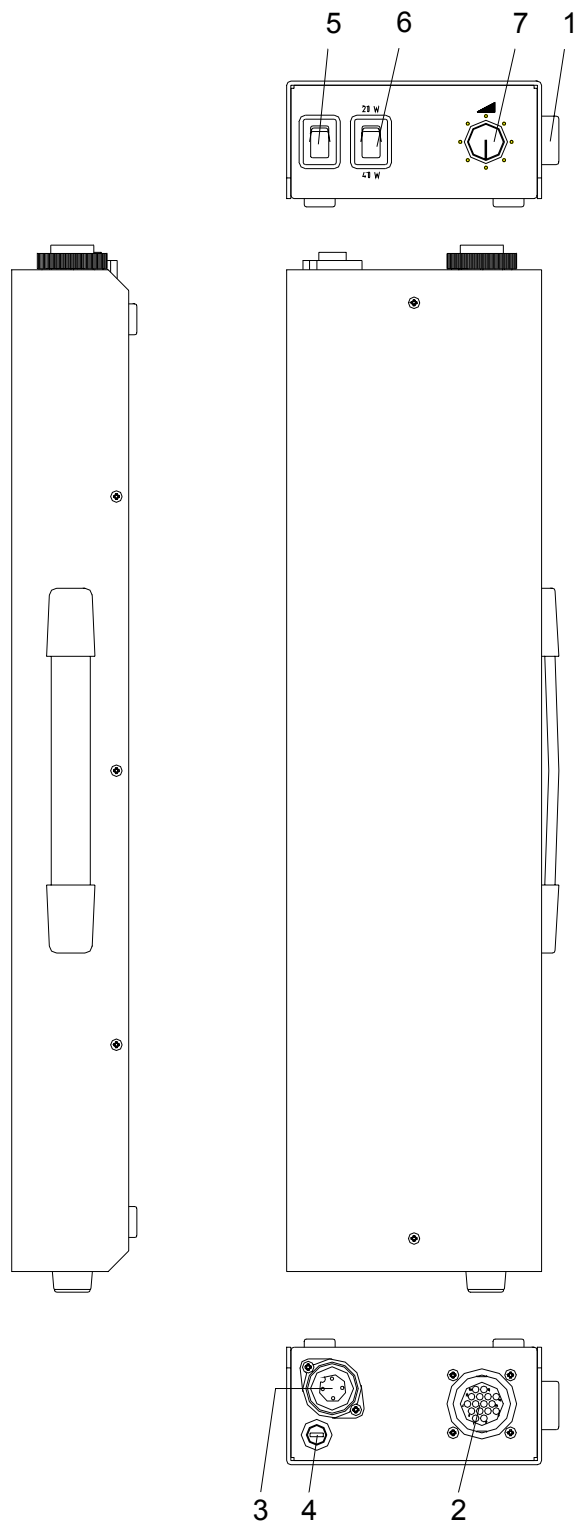
The required light output can be set (100 % - 30 % adjustment range) with the power regulator (dimmer). Please note that the colour temperature can change depending on which type of tubes are used.

## **3. Installing or replacing tubes**

Never replace a lamp without first disconnecting the light bank from the ballast unit.

#### **4. Controls and displays EB 2x20/40 / EB 4x20/40**

- 1. Grip**
- 2. Lamp socket**
- 3. Mains cable socket**
- 4. Mains fuse**
- 5. Mains switch (on/off) with monitoring lamp**
- 6. Power selector**
- 7. Power regulator**



## 5. Technical data ballast units

### Lumax EB 2x 20/40

	<b>230 V version</b>	<b>120 V version</b>
Article no.:	742-0420	742-0310
Mains voltage:	200-240 V AC	100-120 V
Mains frequency:	50 Hz – 60 Hz	50 Hz – 60 Hz
Output:	100 VA	130 VA
Nominal capacity:	2x20 W / 40 W switchable	2x20 W / 40 W switchable
Safety class:	I	I
Dimensions:	503x88x62 mm	503x88x62 mm
Weight:	1.3 kg	1,4 kg
Power variation:	100 % - 30 %	100 % - 30 %

### Lumax EB 4x 20/40

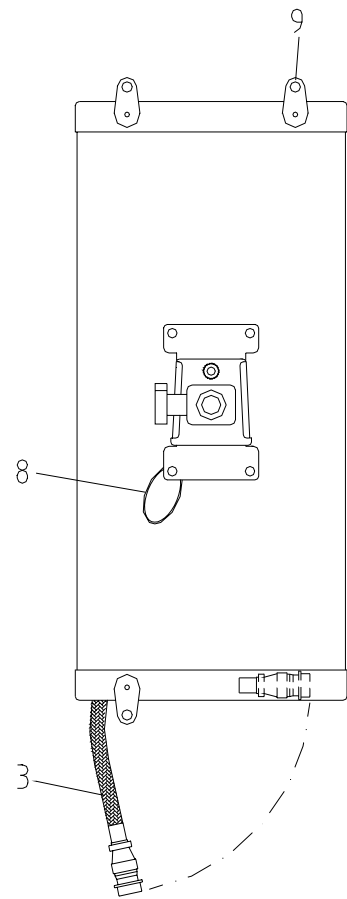
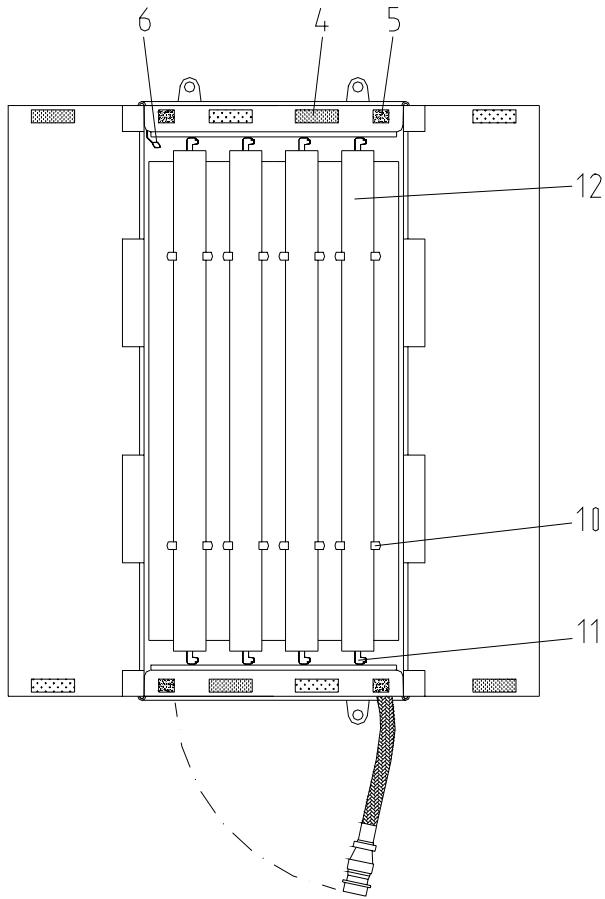
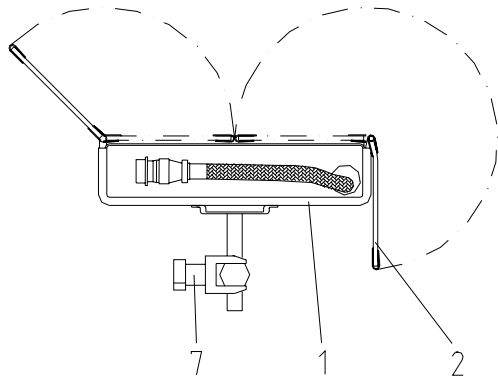
	<b>230 V version</b>	<b>120 V version</b>
Article no.:	742-0220	742-0120
Mains voltage:	200-240 V AC	100-120 V
Mains frequency:	50 Hz – 60 Hz	50 Hz – 60 Hz
Output:	200 VA	260 VA
Nominal capacity:	4x20 W / 40 W switchable	4x20 W / 40 W switchable
Safety class:	I	I
Dimensions:	503x132x62 mm	503x132x62 mm
Weight:	1.8 kg	1,9 kg
Power variation:	100 % - 30 %	100 % - 30 %.

## 6. Operation of kobold equipment with motor-generators

**Kobold** equipment is basically suitable for operation with motor-generators provided that the supply voltage remains within the tolerance limits of 200-264V or 95-135V respectively under all load conditions (including capacitive load). Experience shows that this usually requires electronically stabilized motor-generators.

**7. Controls:  
Light banks Lumax SB12 / SB 22 / SB 14 / SB 24**

- 1. Housing**
- 2. Barn door**
- 3. Cable stub for connecting lamp cable**
- 4. Velcro locking for barn door**
- 5. Velcro fastening for light grid**
- 6. Safety rope for light grid**
- 7. Stand adapter plate with ball joint**
- 8. Safety loop for ceiling installation**
- 9. Eye for wall installation**
- 10. Retaining clips for fluorescent tubes with 26 mm and 38 mm Ø**
- 11. Plug-in contacts for fluorescent tubes**
- 12. Fluorescent tube**



## 8. Technical data light banks

### Lumax SB 12

Article no.: 381-1012  
Dimensions: 700 x 193 x 87 mm without adapter plate  
Weight: 1.6 kg tubes incl., without adapter plate  
Lamp cable: 3 m (removable)  
Tubes: alternatively 26 mm or 38 mm  
Photometric: 320 lx at 2 m

### Lumax SB 22

Article no.: 381-1022  
Dimensions: 1310 x 193 x 87 mm without adapter plate  
Weight: 3.2 kg tubes incl., without adapter plate  
Lamp cable: 3 m (removable)  
Tubes: alternatively 26 mm or 38 mm  
Photometric: 750 lx at 2 m

### Lumax SB 14

Article no.: 381-1014  
Dimensions: 700 x 321 x 87 mm without adapter plate  
Weight: 2.7 kg tubes incl., without adapter plate  
Lamp cable: 3 m (removable)  
Tubes: alternatively 26 mm or 38 mm  
Photometric: 320 lx at 2 m

### Lumax SB 24

Article no.: 381-1024  
Dimensions: 1310 x 321 x 87 mm without adapter plate  
Weight: 4.3 kg tubes incl., without adapter plate  
Lamp cable: 3 m (removable)  
Tubes: alternatively 26 mm or 38 mm  
Photometric: 750 lx at 2 m

## 9. Replacement parts and accessories

Art. no. 742-0719	Lamp cable, 3 m, for SB 12 and SB 14
Art. no. 742-0715	Lamp cable, 3 m, for SB 22 and SB 24
Art. no. 683-1075	Daylight fluorescent tubes 20 W, 5800 K, with safety sheath, for SB 12 and SB14
Art. no. 683-1135	Daylight fluorescent tubes 40 W, 5800 K, with safety sheath, for SB 22 and SB24
Art. no. 673-1075	Artificial light fluorescent tubes 20 W, 3400 K, with safety sheath, for SB 12 and SB14
Art. no. 673-1135	Artificial light fluorescent tubes 40 W, 3400 K, with safety sheath, for SB 22 and SB24
Art. no. 033-0117	Light grid for SB 12, black
Art. no. 033-0103	Light grid for SB 12, silver
Art. no. 033-0118	Light grid for SB 22, black
Art. no. 033-0104	Light grid for SB 22, silver
Art. no. 033-0114	Light grid for SB 14, black
Art. no. 033-0102	Light grid for SB 14, silver
Art. no. 033-0116	Light grid for SB 24, black
Art. no. 033-0101	Light grid for SB 24, silver
Art. no. 817-0810	Adapter plate with 16 mm socket and mount

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