# Kjaer + Loege KLOSS

Dimmer

#### Overview

K+L dim master dimmer is designed to work with the 'Live' wire, no 'Neutral' wire is required for connection. This makes the dimmer easily retrofit to normal ON/OFF switches. The dimmer has a dial knob to control the brightness level. Additional dial knob control modules (K+L dim slave) can be purchased to connect to this master dimmer to extend the brightness dial control to several locations. The master dimmer and the control modules are designed to retrofit existing dual pole, triple pole and quad pole wiring circuits without the requirement of re-wiring. Only simple wire connections and plug and play actions are needed.

Since different brands of LED bulbs have different dimming control circuits, the K+L DIM master provides user friendly maximum and minimum brightness tuning to define the dimming range and this makes the dimmer work with most brands of LED bulbs and dimmable electronic transformers.

Some LED bulbs require a large amount of power to turn on and so do not illuminate at low brightness levels. The dimmer provides a programmable trigger function which ensures a chain of combination of different brands and rating of LED light bulbs connected to turn on at the same time while in very low dimming brightness levels.

### Operation

Dial knob - turn dial knob clockwise to increase brightness, anticlockwise to decrease brightness, press dial knob to turn dimmer ON/OFF.

### Minimum brightness adjustment

- 1. Switch on dimmer.
- 2. Tum dial knob anti-clockwise 3 full turns (3 x 360°), or keep turning anti-clockwise, within 5 secs.
- 3. The Load (lamps) will blink once.
- 4. Within 5 secs, press the dial knob once.
- 5. The load (lamps) will blink once, and you are now entered into the minimum brightness adjusting mode.
- 6. To adjust the minimum brightness, turn dial knob clockwise increase brightness, anti-clockwise decrease brightness (minimum adjustment range between 0 50% of full brightness). Adjust the minimum brightness to your required level and press the dial knob once to store the minimum adjustment setting. Dimmer will return to normal operating mode.

# Maximum brightness adjustment

Similar to the minimum adjustment above, except step 2 - Turn dial Knob clockwise instead of tuning anti-clockwise.

# **Trigger setting**

Default factory setting is set to zero (off).

- 1. Tum Dimmer ON.
- 2. Tum dial knob clockwise 45° and then turn anti-clockwise 45° for 5 times.
- 3. The light source will blink once.
- 4. Press the dial knob once, within 5 seconds.
- 5. The light source will blink once, to confirm that you are in the trigger setting mode.
- 6. You can now adjust the trigger brightness by turning the dial knob. The trigger brightness level can be set from 0 to 100% of max brightness level with a pulse width of 0.6 sec.
- After adjusting the trigger brightness, press the dial knob once and the setting value will be stored. Dimmer will return to normal operating mode.

### Overload protection

The dimmer is protected against overload. If an overload occurs the lamps will blink 5 times and then automatically turn off, Correct the overload issue and then turn on the dimmer again by pressing the ON/OFF button once to resume operation.

### Short circuit protection

The dimmer is protected against a short circuit. If short circuit occurs the dimmer output circuit will automatically turn off. Correct the circuit wiring and turn on the dimmer again by pressing the ON/Off button to turn the dimmer back on.

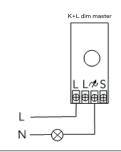
#### Resetting the dimmer

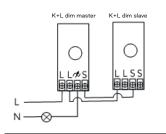
Press the dial knob button more than 8 seconds to reset the dimmer to the factory default settings.

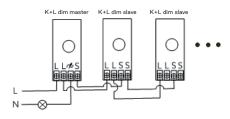
#### Fitting dimmer

Installation should pe performed by a qualified electrician. Switch off at the mains. Connect the dimmer as indicate in the below, Up to four additional control modules (K+L dim slave) can be connected to the K+L dim master to provide multi ON/OFF and dimming control at differerent locations, See the connection diagrams of the multi-location control modules below.

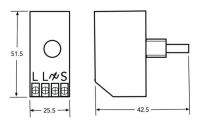
# Connection diagrams:







# product dimensions:



Specifications: 71129-01/71131-01

Dimming control: Dial knob Voltage: 220 - 240VAC 50Hz

Load: 1-200VA Dimmer type: Trailing edge

Load type: Ohmic, LED, halogen, electronic dimming transformer

Brightness adjustments: Max. and min. level

Trigger-pulse width: 0,6 sec IP-rating: P20 IK-rating: 1K10

Ambient temp.: -20°C to 40°C Storage temp. -25°C to 75°C

Certification: CE

Build material: Polycarbonate (PC)/metal Size/weight: 84x84x44mm/95g

The dimmer has built-in overload- and short circuit protection. Maximum distance between the first and last dimming control unit is 50m.



Dimmer

### Technical data

Voltage 220-240V AC Load 1-200VA Dimmer type Phase section

Load type Ohmsk/LED/halogen/ electronic dimming transformer

Brighness adjustment Max-, and min levels + boost function

Integrated protection Short circuit protection and overload protection

Operating temperature -20°C to 40°C

# **Product data**

Installation Integrated (System 55)

Materials Polycarbonat (PC) / Metal / Oak/ Fiber-reinforced concrete

Product colour Light and dark oak/ White and grey concrete

 IP-class
 IP20

 K-class
 IK10

 Isolation class
 Class II

 Product size
 85x85x49mm

 Insert depth
 24mm

Weight Oak: 142g (Slave) / 149g (Master). Concrete: 198g (Slave) / 205g (Master)

Certifications CE Guarantee 5 years

### K+L DIM digital dimmer

Product name	Item number	EL-number	Description	Package
K+L dim master oak	KL 14-202	1419772	Universal digital dimmer	100×100×65mm
K+L dim master dark oak	KL 14-203	1419773	Universal digital dimmer	100×100×65mm
K+L dim master grey concrete	KL 14-204	1419774	Universal digital dimmer	100×100×65mm
K+L dim master white concrete	KL 14-205	1419775	Universal digital dimmer	100×100×65mm
K+L dim slave oak	KL 14-206	1419776	Universal digital dimmer	100×100×65mm
K+L dim slave dark oak	KL 14-207	1419777	Universal digital dimmer	100×100×65mm
K+L dim slave grey concrete	KL 14-208	1419778	Universal digital dimmer	100×100×65mm
K+L dim slave white concrete	KL 14-209	1419779	Universal digital dimmer	100×100×65mm

### **Product description**

SLDIM master is a universal digital dimmer designed to work with only one phase. This allows the dimmer to easily replace a standard ON/ OFF switch without the need to make changes to the wiring. It is possible to connect one or more slave dimmers; something which enables the light to be controlled from several locations. This function requires only two conductors! Which makes it very easy to replace an end/intermediate inverter system. As different LED light sources have different starting current requirements, it is normal difficult to get the light source to light up instantly at a low set light level. This dimmer gives the user the ability to easily adjust minimum level, maximum level and the boost level; which ensures that all the light sources light up at the same time. The dimmer is specially adjusted to fit most LED light sources and dimmable electronic transformers.

**SLDIM** slave is an external controller to the SLDIM master for adjusting the light level and turning ON/OFF the light from two or more locations. The slave unit is made especially to control the master unit and cannot be used as a dimmer on its own! A maximum of four slave units recommended connected to the master unit!