

LED-Headlight *Edelux*

with switch/automatic sensor and standlight function

Instructions for Use

The *Edelux* is especially designed for use with gearless hub dynamos. The provided or already assembled plugs fit the Schmidts Original Nabendynamo (SON), but the light's use with other hub dynamos is also possible. - The most important characteristic of the *Edelux* is the outstanding light technology, which achieves a wide and even illumination of the road. The optical system („IQ-TEC“-mirror) was developed by Busch & Müller. Rugged mechanical design, reliable electrical contacts and good sealing ensure problem-free operation in daily use, regardless of weather. Efficiency and LED life span depend on its cooling. Therefore the LED is placed on a copper heat sink, which in turn conducts the heat to the aluminum housing.

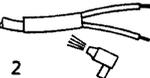
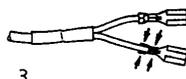
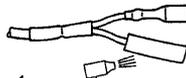
Assembly on the Bicycle

You mount *Edelux* with standard headlight brackets. Tighten the screw connections firmly so that the headlight cannot move by itself. However it should still be possible to correct the beam angle by hand. Align the light cone in such a way that the front edge of the illuminated area reaches the roadway 15-20 m in front of the bicycle. Attachment to the fork bridge of a suspension fork results in a high swinging load for the bracket. Therefore mounting on the handlebar or stem is preferable on bicycles with front suspension.

Wiring

The headlight is supplied with coaxial cable. Route the cable along the inside of the fork blade to the SON and plug it in (contacts arbitrarily interchangeable). Fasten the cable with zip ties in such a way that removing the plugs is easily possible when removing the wheel.

In case the plugs are not fitted cut the cable to a suitable length and connect the plugs enclosed, according to the following pictures.

	<ul style="list-style-type: none">• Cut cable to a suitable length and carefully remove about 4 cm of outer insulation• Twist the underlying wires together with caution
	<ul style="list-style-type: none">• Heat a piece of thin shrink sleeve with flame or a hot air gun to shrink it onto the outer conductor.• Do the same with a piece of fatter shrink sleeve overlapping the junction• Trim the sleeve and inner insulation to expose about 5 mm of each cable
	<ul style="list-style-type: none">• Fit the plugs, using a crimp tool or pliers to secure both the insulation and the cables. The first pair of claws must grip the insulation (in case of doubt solder additionally)
	<ul style="list-style-type: none">• Slide and shrink a piece of fat shrink sleeve over each plug• Grease the plugs a little, so you can push them onto the SON hub dynamo contacts more easily.

For connection to other hub dynamos see their instruction manual
At hub dynamos with integral overvoltage protection the *Edelux* does not reach full brightness.

If one contact of the **dynamo is electrically connected to the frame (e.g. all models of Shimano)**, the wires are no longer interchangeable: The outer conductor of the coaxial cable (not insulated or covered with

black shrink sleeve) must be connected to the ground , the transparent insulated interior wire must be connected to the phase contact of the dynamo.

Connection of a Rear Lamp

The switch of the *Edelux* will also control the operation of the rear lamp. A single wire connection from the spade terminal in the base of the *Edelux* to the rear lamp will usually be sufficient. The included 2.8 mm plug for the rear light cable should be mounted according to pictures 3 and 4 of the table above. The plug must be covered with shrink sleeve otherwise a short-circuit to the aluminum housing will occur.

Some bicycle frames (and fork bearings) don't conduct electrical power properly. A definite earth connection to the tail light can be made by adding a 6 mm crimp eyelet between the lamp and the bracket which is crimped on the mass cable of a double wiring or coaxial cable.

Switch – Automatic Sensor - Standlight

The switching contact is placed, optimally protected, inside the headlight base. It is controlled by a magnet in the black switching ring. The automatic light sensor is active when the nose of the switching ring points up („S“), i.e. the light turns on automatically in beginnings of darkness. When you switch the nose to the left position („0“), as viewed from the rear, the light is turned out permanently, in the position to the right („1“) it is switched on. Should the switching ring be pulled off for once, put it back correctly onto the housing: seen from the back, the „1“ should be on the left and the „0“ on the right side of the nose. If the switching ring should be missing, the *Edelux* is in sensor-mode.

After a short ride with light switched on standlight is available. The standlight capacitor is fully loaded after riding continuously for 5 minutes and will then provide about 4 minutes standlight.

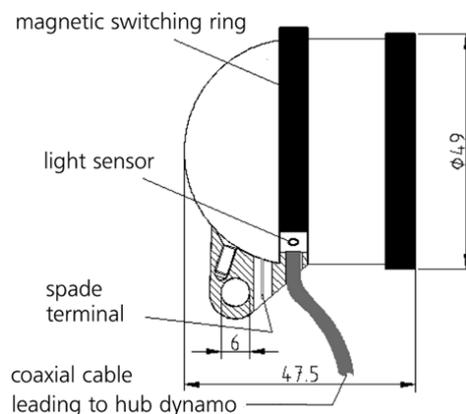
Battery-powered use of the *Edelux* is not recommended. Voltage higher than 7,5 V – even for a very short time – may damage electronics and LED. Though voltage lower than 6,5 V is uncritical, it will lead to reduced luminous flux.

Overvoltage Protection

The electronics within the *Edelux* limits the output at the rear light to 9 Volt and in this way protects LED-rear-lights of overvoltage. Rear lights with bulbs should not be applied together with the *Edelux*.

Guarantee/ Spare Parts

We issue a 5 year faultless function guarantee for the *Edelux*. The switching ring is available as spare part. The *Edelux* does not contain any parts which need maintenance. **Do not try to open the headlight!** You might damage sealing, screwed connections and electrical insulation.



Information

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