

Legend

- A Headlamp bracket, short
- B Casing base
- C Hexagonal bolt
- D Hexagonal nut
- E Lighting unit

(SUPRAVISION LED, CAD reflector, front rear reflector, ultrasonically sealed enclosed cooling system)

- F Lamp casing
- G Switch
- H Duplex cable
- Zinc dye-cast headlamp bracket (especially suited for cantilever or hydraulic brakes, optionally available on request)
- S Light/dark sensor
- 1 Double plug contact 'current'
- 2 Double plug contact 'mass'

'DLUMOTEC oval' Assembly and User Manual

General:

With this dynamo-operated LED headlamp you have selected a high-quality state-of-the-art bicycle lighting system.

All versions of the 'DLUMOTEC oval' series bear the German certification mark confirming compilance with the highly sophisticated requirements of the so-called 10 Lux Regulation (minimum lighting value)! The Xenon-type brilliant white light is generated by the high-performance 'SUPRAVISION' LED. The headlamp Illuminates the track ahead at a speed of no more than just 3 km/h, offering a revolutionarily new lighting technology with its LED service life of up to 100,000 hours (comparing to only 100 hours rendered by a Halogen lamp) so that it is no longer necessary to change the bulb.

Apart from the standard version, our product range also includes versions with light/dark sensor for automatic start-up of the entire lighting system for bicycles fed by a hub dynamo ('DLU-MOTEC oval senso') and with electronic standlight function via a condenser (no accumulator or battery required), i.e. 'DLUMOTEC oval plus' for bicycles with bottle neck dynamos and 'DLUMOTEC oval senso plus' as well as 'DLUMOTEC oval N' or 'N plus' (complete with a switch to activate a hub dynamo) all of which are, of course, made in Germany.

Assembly:

The 'DLUMOTEC oval' headlamps are intended for attachment on your bicycle by means of a bracket (A). Place the bracket onto the casing base (B) and affix it with the enclosed screw (C) and hexagonal nut (D) - Important: Once attached to the handlebar bracket, align your headlamp in a way to make sure that the track is illuminated at a distance of about 5 to 7 m in front of the bike. Now tighten the screw and nut with a suitably sized key so as to make sure that the headlamp cannot change its position.

Cable connection:

The upper duplex contact (1) is the plug contact for the current cable while the lower (2) is intended for the mass cable. The free plug contacts can be used to connect the rear light. In any case, we recommend to use a duplex cable in order to ensure perfect current and mass contact.

Bicycles with a hub dynamo are generally equipped with an internal duplex cable. Please refer to the notes below for further information!

SUPRAVISION-LED:

This high-performance LED is firmly connected to the reflector and a cooling unit. Thanks to its long service life, there is no need to change the lamp. Accordingly and in compliance with German StVZO, the headlamp cannot be opened. The integral cooling system protects the high-performance LED against overheating, thus ensuring many years of high lighting efficiency.

Caution:

The integral over-voltage protection shields the LED in case of rear light failure. In any case and for your own safety, make sure to remedy the defect as soon as possible. Do not ride your bike with a defective lighting system for an extended period of time! We do not assume llability for any damage to the headlamp or rear light caused by over-voltage as well as for opened headlamps.

Important Information for owners of a 'DLUMOTEC oval plus': You have bought a bicycle headlamp of a particularly high quali

You have bought a bicycle headlamp of a particularly high quality that incorporates an automatic electronic standilght sets enabled by the high performance LED and generated via a condenser. A small amount of the energy supplied by the dynamo is stored in the condenser whilst riding. After approximately 3 minutes at a speed of roughly 20 km/h, the condenser is fully charged. At low speeds and when stationary, the condenser supplies the white LED. This technology is always ready for operation and

maintenance-free and does not require batteries or accumulators.

Additional information for users of a 'DLUMOTEC oval senso' or 'DLUMOTEC oval senso plus':

You own an LED dynamo headlamp featuring the brand new sensor technology. The 'plus' version incorporates the standlight function described above.

When using a (permanently operating) hub dynamo, the complete lighting system is automatically activated in case of poor light conditions and darkness, e.g. also in a tunnel. The headiamp features an interior duplex cable (H) that must be connected to the hub dynamo (black wire = current, black/white wire = mass). Connect the current cable / current wire of the rear light at the lower contact (2).

Important Note: Use of this duplex cable (H) Incorporated in the headlamp is a precondition for trouble-free operation. It must not be removed (cut off completely). Shortening the cable to the regulred size is acceptable.

The light/dark sensor (S) is incorporated in the headlamp casing (F). The three-position switch (G) features following functions:

Position '1': ('1' is visible with switch pushed downwards)
In this position, the bicycle lighting system is electrically connected to the hub dynamo and shines whilst riding - also in daylight.

Position 'O': (This 'O' position = covering half of 1' and 'S')
The bicycle lighting system is electrically disconnected from the hub dynamo and does not shine - not even in darkness.

Position 'S': (The switch is pushed upwards and the 'S' is visible below the switch)

The lighting system is now electrically connected to the hub dynamo. The headlamp and rear light are automatically activated in case of poor light conditions and darkness.

Additional Information for users of a 'DLUMOTEC oval N' or 'DLUMOTEC oval N plus':

These headlamps, too, are equipped with an internal duplex cable (H) to connect to a hub dynamo, though without an integral light/dark sensor. You are urgently requested to proceed according to the above 'Important Note'. The two-position switch (ON/OFF) has the following functions:

Position'X': (The switch nose is directed to the symbol 'on'.) In this position, the bicycle lighting system is in operation and shines whilst riding - also in daylight.

Position '0': (The switch nose is directed to the symbol '0'.)
The bicycle lighting system is electrically disconnected from the hub dynamo and does not shine - not even in darkness,

We hope you will enjoy your 'DLUMOTEC oval' and many years of safe cycling.

For extra safety, we recommend our bicycle rear lights with electronic standlight function operating on an LED and condenser. Ask your specialized trader for 'DToplight XS plus', 'DToplight plus', 'Toplight plus', 'Seculite plus', 'Seculite cross plus' and '4D-lite plus'.

THE VISION OF BIKING

Made in Germany

58540 Meinerzhagen Tel: 0 23 54-9 15-6 Fax: 0 23 54-9 15-7 00 www.bumm.de

Busch & Müller KG



