



Cordless LED light

Instructions for Use

Read this document carefully before using the product.

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Introduction

Intended Use

Butterfly is a cordless headlight system designed to provide illumination during dental or minor surgical procedures. The Butterfly is part of the Admetec PowerLight product family.

Using a battery pack gives the user complete portability allowing unrestricted movement.

About Butterfly

Butterfly is a new generation of cordless dentist and surgeon head- or loupe-mounted light source featuring:

- Narrow, high-power beam
- No dazzle effect
- Daylight color, ensuring that you see the true color of teeth and tissues even when natural daylight is not available
- Very light weight
- Even light intensity until full battery discharge
- Rechargeable Li-Ion-Polymer battery-based battery packs easily attached to your head light
- Easy and fast-changeable batteries connected with magnets
- Low battery audio alert
- 2 hours of work at maximum light intensity without switching batteries
- 3 identical battery packs included in the package when one discharges, just switch to the next one
- Orange filter to prevent composite curing
- The lifetime of the headlight is 10 years

Safety Precautions

Do not use any third-party chargers with **Butterfly** Battery Packs, even if they look identical. Third-party chargers are not compatible with the battery packs and could damage it.

Prevent battery packs from overheating. Avoid direct sunlight or heated surfaces.

Prevent battery packs from shock.

Do not use close to explosive or highly flammable materials like alcohol, methanol, acetone, etc.

Issue	Troubleshooting
The light does not work steadily due to discharged battery	Replace battery pack. Charge the discharged battery
Battery does not function	Contact local dealer.
LED failure	Contact local dealer.
Battery overheats or produces fire during charge.	Contact local dealer.
Battery leakage	Contact local dealer.
Battery swelling	Contact local dealer.
Buttons are stuck	Contact local dealer.

Troubleshooting



Figure 1: Butterfly Light Kit

The Butterfly kit includes:

- 1. Battery Charger
- 2. Charging cable
- 3. Charging pad
- 4. 3 battery packs
- 5. Headlight
- 6. External orange filter
- 7. Screwdriver

Battery Charger

To charge the battery,

- 1. Connect Charging pad to charger using the provided cable.
- 2. Plug the charger into a wall outlet.
- 3. Place the battery pack on the charging pad as shown in Figure 2. It is possible to charge two battery packs simultaneously.

The charging indicator will light red. The indicator will change to green, when the battery is fully charged.



Figure 2: Battery Pack connected to Charging pad

Average charging time of an empty battery is 1.5 hours.

Battery packs may remain on the charging pad when not in use. In this case, the charging pad must be connected to the powered-on charger.

Battery Pack

Each **Butterfly** kit includes 3 battery pack units serving as power source and control panel for the headlight.



Figure 3: Battery Pack: Top View

Battery packs control – turning the light source ON and OFF. This function is controlled by touching the area marked in green in Figure 3.



Figure 3.1: Dimmer

Dimming the light source in two different intensities is controlled by touching the area on the right side of the battery, marked in green on the Figure 3.1.



Figure 4: Connection (Bottom) Panel



The battery pack supports a constant level of light intensity during the whole period of discharging. Once the battery is fully discharged, the light turns off.

<u>Headlight</u>

The headlight is permanently connected to the headlight bracket that consists of:

- headlight cable, connecting the light source to the battery connection pad
- hinge allowing for tilt adjustment of the light direction
- battery connection pad
- Mechanical connector for mounting the headlight on frames

To Use Butterfly:

1. Mount the external orange filter onto the front part of light source by pushing the outer ring of the filter onto the front part of the light source as shown in Figure 5.



Figure 5: Mounting External Filter

2. Attach the light source to the mechanical connector on the loupes frame or on the universal clip as shown in Figure 6 and Figure 7.



Figure 6: Attaching the Headlight Loops Frame



Figure 7: Light Source Attached To Universal Clip

3. Place the battery pack on the connection pad. The battery pack must be oriented so that the Butterfly logo faces ahead. The magnets will align the battery electrodes with the connection pad.



When attempting to place battery pack in reversed position, the magnets will not allow it to be attached to the connection pad.

4. Once the battery pack is aligned, turn your light on.



Figure 8: Butterfly Mounted on Frame

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Figure 9: Headlight Assembled on Loupes Frame

5. Adjust angle of the light direction to get light beam visible through the loupes.

Technical Specifications

Battery Charger

Input voltage	100 – 240 V AC
Output voltage	5 V DC

Battery Pack

Internal battery voltage:	3.7 V
Battery capacity:	0.56 Ah
Full battery charging time	1.5 hours
Average working time	2 hours
Length	50 mm
Width:	24 mm
Depth:	12.5 mm
Weight:	16 g

Headlight

Luminous intensity	145 lm
Illuminance	35,000 lx
Color temperature	5700 °K
Length	43 mm
Diameter	19 mm
Weight (w/o headband)	7 g
LED operating resource	50,000 hours
Spot size diameter at 35 mm	70 mm

<u>Warranty</u>

Warranty Coverage

Admetec's warranty obligations for the *Butterfly* are limited to the terms set forth below:

Admetec warrants the *Butterfly* product against defects in materials and workmanship for a period of two (2) years for the headlight and one (1) year for all other supplied parts from the date of original purchase ("Warranty Period").

If a defect arises and a valid claim is received by Admetec within the Warranty Period, Admetec will (1) repair the product at no charge, using new or refurbished replacement parts, (2) exchange the product with a product that is new or which has been manufactured from new or serviceable used parts and is at least functionally equivalent to the original product.

If a defect arises and a valid claim is received by Admetec after the first ninety (90) days of the Warranty Period, a shipping and handling charge will apply to any repair or exchange of the product undertaken by Admetec.

When a product or part thereof is exchanged, any replacement item becomes your property and the replaced item becomes Admetec's property.

Exclusions and Limitations

This warranty does not apply: (a) to damage caused by accident, abuse, misuse, misapplication, or non-Admetec products; (b) to damage caused by service performed by anyone other than Admetec; (c) to a product or a part that has been modified without the written permission of Admetec; or (d) if any Admetec warranty label has been removed or defaced.

CE	CE Mark indicating that the device complies with Regulation (EU) 2017/745 of the European Parliament and of the Council of 5 April 2017 on medical devices
	Admetec Solutions Ltd. Yokhanan HaSandlar St. 18 Haifa 3296218, Israel.
EC REP	Obelis Goup Bd Général Wahis, 53, Brussels, B-1030 Belgium
MD	Medical Device
<u>_</u>	Caution! Consult accompanying documents
LOT	Batch number
REF	Catalog number



If you have purchased Admetec-branded electrical or electronic products in the EU and are intending to discard these products at the end of their useful life, please do not dispose of them with your other household or municipal waste. Admetec has labeled its branded electronic products with the WEEE Symbol to alert our customers that products bearing this label should not be disposed of in a landfill or with municipal or household waste in the EU. Instead, contact the local e-waste recycling center.

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