Powerlight - Instructions for Use



# **Instructions for Use**

Read this document carefully before using the product.

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# Introduction

# Intended Use

**PowerLight** is a headlight system designed to provide illumination during dental or minor surgical procedures.

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

# About Powerlight

**PowerLight** is a new generation of dentist and surgeon loupemounted light source featuring:

- Narrow, high-power beam
- No dazzle effect
- Daylight color, ensuring that you see the true color of teeth and tissue even when natural daylight is not available
- Very light weight
- Even light intensity until full battery discharge
- Rechargeable Li-Ion-Polymer battery-based Power Pack conveniently attached to your belt
- Digital adjustment of light intensity
- Battery status indicator
- Over 6 hours at maximum light intensity without switching batteries
- Two identical Power Packs included in the package when one discharges, just plug in the second one
- Quick charging
- Yellow filter to prevent composite curing
- Yellow filter remote control in Orchid-F model

# Safety Precautions Safety Precautions

# Do not use any third-party chargers with PowerLight PowerPacks, even if they look identical. Third-party chargers are not compatible with the PowerPack and could damage it.

Prevent PowerPack from overheating. Avoid direct sunlight or heated surfaces.

Before using the device, verify that it is assembled and connected as described in section Headlight on page12.

When used with non-Admetec loupes, ensure you use the appropriate mechanical connector.

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 broken cable between battery and light source.	Replace cable. Contact local dealer for instructions.
Orchid F: yellow filter is stuck.	Contact local dealer.
Low brightness	Used the brightness adjustment buttons (see Table 1)
LED failure	Contact local dealer.
Battery overheats or produces fire during charge.	Contact local dealer.

# **Troubleshooting**

Issue	Troubleshooting
Battery leakage	Contact local dealer.
Battery swelling	Contact local dealer.
Buttons are stuck	Contact local dealer.

# Legend to Accompanying Labels

Label	Explanation
	Manufacturer
EC REP	Authorized representative in EU
$\land$	Caution! Consult accompanying documents
LOT	Batch number
REF	Catalog number
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
X	This device cannot be disposed as unsorted municipal waste. Contact your local e-waste recycling center.
MD	Medical Device



Figure 1: Orchid Powerlight

The Powerlight includes:

- 1. Battery Charger
- 2. 2 PowerPack units
- 3. Headlight
- 4. External yellow filter (Orchid model only)



Figure 2: Power Light Set

# Battery Charger

To charge the battery,

- 1. Insert the charger jack into the charger connection port on the PowerPack (see Figure 3).
- 2. Plug the charger into a wall outlet.

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



Figure 3: PowerPack Connected to Charger

Average charging time of an empty battery is 2.5 hours.

PowerPack may stay connected to the charger when not in use.





Do not use any third-party chargers with *Powerlask*, PowerPacks, even if they look identical. Third-party chargers are not compatible with the PowerPack and could damage it.

#### Caution



Prevent PowerPack from overheating.

To check battery status, press the "Check" button (see Figure 4). The blue status bars will light. Every segment indicates approximately 20% of full battery capacity.

# PowerPack

Each *Powerlight* kit includes two PowerPack units serving as power source and control panel for the headlight.



Figure 4: Front/Control Panel

#### Table 1: PowerPack Controls and Indicators

Item	Description	
ON/OFF	Power ON/OFF switch	
Charge/Full	Charge indicator	
Filter	Battery check and filter control	Press and release to check the battery level.
	button	Press and hold to turn the yellow filter on and off.
Full	Battery level indicator	

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Item	Description	
- +	Intensity controls	Increase of decrease the light intensity.



Figure 5: Rear Panel with Belt Clip

Notes	PowerPack keeps constant level of light intensity during the whole period of discharging. Once the battery is fully discharged, the light turns off.
	PowerPack remembers the last intensity level setting until the battery is fully discharged. After the battery is recharged or replaced, the light source turns on at its maximum intensity.





Charger Connection Port

LED Light Connection Port

## Figure 6: PowerPack Connection Ports

#### **Headlight**

Plug the headlight cable directly into the headlight connection port on the right side of PowerPack, as shown in Figure 9.



Figure 7: Headlights

#### To Use Powerlight Orchid and Orchid F

1. Mount the external yellow filter (only for Orchid F model) onto the front part of light source (see). For this purpose, loosen the screw shown in Figure 8, place plastic ring on the light source, and secure the screw again.



Figure 8: Mounting External Yellow Filter

 Connect light source cable to the PowerPack as shown in Figure 9. Before using the headlight, check battery level by pressing the "Check" button.



Figure 9: Connecting the Headlight

 Adjust lighting beam to coincide with through-the-loupes viewable area. Adjust light brightness by pressing "+" or "-" buttons.

For a right-handed person, it is recommended to mount the PowerPack on the left side of the body and vice versa. You are ready to start enjoying your work with *PowerLight*.



When using Orchid-F model, make sure the head light is mounted on the frame so that the power cord is facing up, as shown in Figure 10.

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Figure 10: Orchid-F Mounted on Frame

# **Technical Specifications**

# Battery Charger

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

### **PowerPack**

Internal battery voltage:	3.7 V
Battery capacity:	4.0 Ah
Full battery charging time	2.5 hours
Average working time	>6 hours @ max intensity
Digital dimmer	16-step
Height:	95 mm
Width:	62 mm
Depth:	30 mm
Weight:	137 g

## **Headlight**

Parameter	Orchid/Orchid-F
Luminous intensity	190 lm
Illuminance	>60,000 lx
Color temperature	5750 °K
Length	42 mm
Diameter	20 mm
Weight (w/o headband)	9.5 g

Parameter	Orchid/Orchid-F
LED operating resource	50,000 hours
Spot size diameter at 35 mm	80 mm
Lifetime	10 years

# <u>Warranty</u>

## Warranty Coverage

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

Admetec warrants the *PowerLight* 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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