

admetec



Orchid

Instructions for Use

IM4000003 rev.E

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Introduction

Thank you for choosing **admetec**

Orchid is the name of Admetec's series of wired headlights designed for use with your loupes. All Orchid models provide powerful illumination in an ultra-usuable, lightweight configuration.

There are 4 Orchid models: Orchid, Orchid-F, Orchid E, and Orchid-S.

Please note the instructions relevant for your specific Orchid model as indicated in this document.

About Orchid

Orchid lights are powerful, highly efficient, and easy to use due to:

High-quality illumination:

- narrow, high-power light beam with no “dazzle” effects
- daylight color, ensuring that you see the true color of teeth and tissue even when natural daylight is not available
- retains even light intensity until full battery discharge

Convenient to use:

- very lightweight
- over 6 hours at maximum light intensity without switching batteries
- comes with two identical PowerPack batteries – when one discharges, just plug in the second one
- quick charging – rechargeable Li-Ion-Polymer battery with a clear battery status indicator
- smooth digital adjustment of light intensity

For dentists: Yellow filter to prevent composite curing. In the standard Orchid model, the filter is external. In **Orchid F/E** the filter is built into the light source, remotely controlled via the PowerPack

For Surgeons: Orchid-S comes without a filter and with a super-intense light.

Safety Precautions

Do not use any third-party chargers with **Orchid** PowerPacks, even if they look identical. Third-party chargers may not be 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 the “Light source” section on page 9.

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

Do not use in proximity to explosive or highly flammable materials such as: alcohol, methanol, acetone, etc.

Please note that any serious incident should be reported to the manufacturer with relevant documentation describing the event.

Troubleshooting

Issue	Troubleshooting
The light does not work steadily due to a broken cable between the battery and light source	Replace cable. Contact your local dealer for instructions
Orchid F/E: internal yellow filter is stuck	Contact local dealer
Low brightness	Used the brightness adjustment buttons (see page. 10)
LED failure	Contact local dealer
Battery overheats or produces fire while charging	Contact local dealer
Battery leakage	Contact local dealer
Battery swelling	Contact local dealer
Buttons are stuck	Contact local dealer

Product overview



Fig. 01 - Orchid Case

Please note that the image is for illustration. There are some differences in the button placement and shape of the light source between Orchid models

Your Orchid comes with:

1. Battery charger
2. 2x PowerPack battery units (amounts may differ in various countries)
3. Light source
4. External yellow filter (Orchid model only)
5. Screwdriver
6. Allen key



Fig. 02 - 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 indicator light will be red until charged. When the light becomes green, the battery is fully charged.



Fig. 03 – PowerPack Connected to Charger

Average charging time for an empty battery is 2.5 hours.

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

Caution



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

Caution



Prevent PowerPack from overheating.

To check battery status, press the “Check” button (see **Error! Reference source not found.**). A blue light will indicate battery status. Every light segment symbolizes approximately 20% of full battery capacity.

PowerPack – Orchid battery

Each **Orchid** kit includes two PowerPack battery units which serve as a power source and control panel for the headlight.



Fig. 04 - Front/control panel



Fig. 05 - Rear panel with belt clip

Item	Description	
	Power ON/OFF switch	
	Charge indicator	
	Battery check / Yellow Filter control button (Only for Orchid F/E)	Press and release to check the battery level. - To turn ON the Yellow Filter, press and hold the button for 1.5 sec' To turn it OFF, simply press the button again.
	Battery level indicator	
	Intensity controls	Increase or decrease the light intensity.

Notes 	PowerPack maintains a 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.
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Charger connection port



LED light connection port

Fig. 06 - PowerPack connection ports

Light source

Plug the light source cable directly into the light source connection port on the right side of PowerPack, as shown in Figure 09.

A silver cylindrical light source with a black cable.	A silver cylindrical light source with a yellow lens and a black cable.	A silver cylindrical light source with a black cable and a ribbed base.
Orchid	Orchid-F	Orchid-E / Orchid-S

Fig. 07 – Light sources

Getting started:

1. To mount the external yellow filter only for Orchid model – loosen the screw shown in Figure 08, place the composite filter ring on the light source, and secure the screw again.



Fig. 08 - Mounting External Yellow Filter



Fig. 09 - Connecting the Headlight

2. Connect the light source cable to the PowerPack as shown in Figure 09. Before using the headlight, check the battery level by pressing the "Check" button.
3. Mount the light source on your loupes. Adjust the light beam to coincide with the field of view you see through your loupes. Adjust light intensity by pressing "+" or "-" buttons.

Congratulations! You are ready to start enjoying seeing better, with Orchid.

Note 	When using your Orchid, make sure the light source is mounted on the frame so that the power cord is facing up and the wire is on the outside of the frame (Fig 10).
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Fig. 10 – Orchid mounted on frame.

Cleaning Instructions

Orchid is designed and manufactured from high quality components. Ensuring proper care and adherence to the cleaning instructions is essential for preserving the product's lifespan.

Before cleaning, ensure that the PowerPacks are disconnected from the electric outlet and detached from the headlight source.

Follow the instructions below to prevent any functional or aesthetic harm to the **Orchid**:

PowerPacks:

- Wipe the external surface of the **Orchid** with a soft, dry cloth. When necessary, use Admetec Cleaning Wipes or a soft cloth with alcohol up to 70% to gently wipe down the PowerPacks. Squeeze excess fluid out before using. After cleaning, dry with a soft cloth.
- Hold the device securely while cleaning to prevent it from trauma.
- Do not use solvents or other chemicals.
- Avoid wiping with a chemically treated cleaning cloth.
- Under no circumstances, attempt to open the device or insert any object inside the **Orchid**.
- DO NOT directly expose the PowerPacks to running water and DO NOT directly spray it with any solvent and/ or submerge it in any liquid or ultrasonic cleaner.
- Avoid sterilizing in autoclaves or chemiclave, glutaraldehyde, iodophor, or any other sterilization method.

Light Source:

- Wipe the light source surface using:
 - Admetec Cleaning Wipes
 - A mild soap-and-water solution with a soft cloth
 - Soft cloth with alcohol up to 70%.
- Be sure to **squeeze** the cloth to excess fluid out **before** using.
- Gently wipe the lens of the headlight source. Make sure to be gentle when cleaning the headlight source to avoid causing scratches.

- After cleaning, dry with a soft cloth or air dry. If cleaners leave residue on the lens, use a soft, lint-free cloth to remove it.

Don't rinse Headlight source under running water.

Don't submerge in any liquid or ultrasonic cleaner.

Avoid sterilizing in autoclaves or chemiclave, glutaraldehyde, iodophor, or any other sterilization method.

Technical Specifications

Battery charger

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

PowerPack parameters

Parameter	Orchid/Orchid-F/Orchid-E	Orchid-S
Internal battery voltage:	3.7 V	3.7 V
Battery capacity:	4.0 Ah	4.0 Ah
Full battery charge time	2.5 hrs	2.5 hrs
Average working time	>6 hrs @ max intensity	>4 hrs @ max intensity
Digital dimmer	32-step	32-step
Height:	75 mm	75 mm
Width:	58 mm	58 mm
Depth: (w/ belt clip)	28 mm	28 mm
Weight:	107 gr	107 gr

Light source

Parameter	Orchid/Orchid-F	Orchid-E	Orchid-S
Luminous Flux	220 LM	220 LM	275 LM
LUX Intensity	80,000 LUX	150,000 LUX	220,000 LUX
Color temperature	5750 °K	5750 °K	
Length	44 mm	54 mm	
Width	19 mm	29 mm	
Weight	9 gr	14 gr	
LED operating resource	50,000 hrs	50,000 hrs	
Spot size diameter at 350mm	80mm	60mm	
External Filter weight	2 gr (for Orchid)	3 gr (for Orchid-S)	

Warranty

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

Admetec warrants the **Orchid** 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 to: (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 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
	Obelis Goup Bd Général Wahis, 53, Brussels, B-1030 Belgium
	Medical Device
	Caution! Consult accompanying documents
	Batch number
	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 those 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.

Do you need customer service?

Please contact your local distributor.

admetec



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