ZUMTOBEL AGILIO

Product Documentation: Maintenance

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GLP German Light Products GmbH
Industriestraße 2
76307 Karlsbad
GERMANY
www.glp.de

Zumtobel Lighting GmbH
Schweizerstrasse 30
6850 Dornbirn
AUSTRIA
www.zumtobel.com

Specifications are subject to change without notice!

GENERAL IMPORTANT INFORMATION

SAFETY INFORMATION

Please observe before any maintenance or cleaning activity:

- The fixture must be disconnected from the mains before carrying out any maintenance work.
- The fixture must cool down for at least 30 minutes before performing any maintenance activities. After opening the device, components may be live for up to 30 minutes after the power supply has been disconnected.
- When the fixture is connected to the power supply, the spotlight can light up and move.

⚠ Do not touch the moving assemblies.
⚠ Do not look into the light output.

- Only authorized technicians are allowed to open the device. Users can perform external cleaning as described in this section, following the warnings and instructions.
- Any service not covered in this document must be performed by a qualified service technician.
- The performance of the fixture can be affected by accumulations of dust and dirt. In particularly serious cases, the radiator can be damaged by overheating.
- Damage caused by neglected maintenance activities or improper cleaning or maintenance is not covered by the product warranty.
- The fixture must be cleaned regularly for optimal operation in terms of performance and cooling.
- All maintenance operations or upload firmware (device software) must be carried out by professionals or trained and qualified service partner. Please contact your dealer for this.
- Optical and mechanical components are subject to normal wear and tear during the product life. This may result in physical wear and/or optical gradual color changes.
- The wear depends strongly on the operating and environmental conditions. It is therefore not possible to give a general indication of when the performance changes and to what extent. It may be necessary to replace optical or mechanical components.

WARRANTY

The fixture is supplied with a manufacturer's warranty. This warranty includes the function of all functionalities listed in the data sheet under normal operating conditions.
The device must be serviced by a qualified authorized company at least when the limit of the service hours counter is exceeded. The service work must be documented and verified by the authorized company. After the service has been completed, the device Service Interval Counter (Service Hours) must be reset by the authorized service partner.
Regular cleaning within the service intervals of 7500h (Service Hours) is a basic requirement to maintain the manufacturer's warranty. Failure to perform the regular service intervals (Service Hours : 7500h) and its documentation by a service partner, will void manufacturer's warranty.
The manufacturer's warranty applies to normal operation under normal conditions. Special use under exceptional conditions or continuous operation will limit the manufacturer's warranty accordingly.
Failure to observe the regular maintenance intervals or use of the device other than as described in this manual will void the manufacturer's warranty.

LIGHT DEGRADATION

Light Degradation of LED light source is a normal physical process and not part of the manufacturer's warranty. The nominal L80 lifetime of the LED light source is specified as 50000h. This means that under normal operating conditions, the luminous flux of the LED can drop to 80% of the initial luminous flux after 50000 hours (L80).

WEAR PARTS

Due to the normal mechanical functionalities of the motorized moving fixture, normal wear and tear of wear parts will occur. The wear of these wear parts are also normal physical processes that are not covered by the manufacturer's warranty. Wearing parts such as drive belts for the pan and tilt movement must be inspected at regular intervals and replaced when necessary (→ cleaning , maintenance and servicing).

CLEANING

Regular cleaning is required to ensure optimal performance and maximum fixture life.
The light output and optimal cooling of the fixture can be severely impaired in particular by deposits of dust, dirt, smoke particles, fog liquid residues or the like.
The required cleaning interval for the fixture depends heavily on the local operating conditions. For this reason, no binding cleaning plan can be specified in these instructions.
Cooling fans suck in dust and smoke particles from the ambient air. In extreme cases, the radiator must be cleaned after just a few hours of operation.
Environmental factors that may require more frequent cleaning include:

- High air flow, for example near the vent of an air conditioning system.
- heavily polluted air, e.g. from cigarette smoke.
- Airborne particles, for example caused by stage effects, building structures and fittings or the natural environment at outdoor events
- Use of fog machines.

If one or more of the factors listed above are present, specific attention should be paid to contamination during the first hours of operation and, as a result, a suitable, adapted cleaning plan should be drawn up. If in doubt, contact your system integrator who can recommend a suitable maintenance schedule.
The following information must be observed when carrying out the cleaning work:

- Work in a clean, dry, well-lit area.
- Use only gentle pressure.
- Do not use products that contain abrasives.
- Do not use solvents.

Be careful when cleaning optical components, the surfaces are fragile and easily scratched.
Use a vacuum cleaner - do not use a jet of compressed air. A vacuum cleaner removes dirt from the machine and from the area you are working in. An air jet can blow dirt into the lamp. This can leave visible residue in the light output or in front of the lens and possibly even damage the device.
Do not use a strong vacuum cleaner directly on a fan. Due to the strong air flow, the fan blades of the cooling fans can rotate very quickly and cause damage.
Hold the vacuum cleaner nozzle a few inches from the fan and use a soft brush to loosen dust.
Cleaning procedures
To clean the fixture, please proceed as follows:
1.) Disconnect the device from the power supply and allow it to cool down for at least 30 minutes.
2.) Vacuum up dust and loose particles from the outside of the fixture and the ventilation openings.
3.) Clean the lens on the front of the fixture head by gently wiping with a soft, clean, lint-free cloth moistened with a suitable cleaning agent if necessary.
Do not rub the surface with pressure. Remove particles with gentle, repeated wiping. Dry with a soft, clean, lint-free cloth or low-pressure compressed air. Remove stuck particles with an unscented cloth or cotton swab moistened with a suitable detergent or distilled water if necessary.
Make sure the device is dry before restoring power.

MAINTENANCE & SERVICE

COUNTER AND SERVICE INTERVAL COUNTER (SERVICE HOURS)

The fixture has several integrated counters that can be read out via RDM or via mobile device app. The following counters are available:
Total Device Hour (Device hours) - The Device Hour Counter counts the time the fixture is connected to the mains and in operation or ready for operation. This counter cannot be reset.
Total Lamp Hours (Lamp hours) - The Lamp Hour Counter counts the time the LED lamp emits light. This counter cannot be reset.
Service Interval Counter (Service Hours) - The service interval counter counts the operating time of the fixture, similar to the device hour counter. Before these service intervall counter will reach to 7500 hours at the latest, the device must be serviced by a qualified authorized company. The service work must be documented and verified by the authorized company. After the service has been completed, the device service intervall counter must be reset by the authorized service partner.
The Standard Service Counter interval is : 7500h
Regular Service intervals is a basic requirement to maintain the manufacturer's warranty.
INTERNAL INFORMATION: Device- and Lamp hours up to 50h at delivery are normal and can be attributed to production and quality control.

LUBRICATION

The fixture does not require lubrication under normal circumstances. Moving parts must be subject to regular visual and functional tests. If the function is noticeably reduced, they should be re-lubricated by the an authorized service partner with a long-life Teflon-based grease.

RDM

The fixture has the option of reporting error and service feedback as well as parameters such as temperatures, fan speeds, etc. on demand. This data can provide information about any pending service work.
The firmware version installed in the fixture can be read out via RDM.
For optimal operation, the fixture should always be operated with the current device firmware. The device firmware is updated via DoP. If a software update is necessary, contact your authorized service partner.

EXAMPLE MAINTENANCE PLAN AND ACTION INSTRUCTION

The required cleaning interval for the fixture depends heavily on the local operating conditions. For this reason, no binding cleaning plan can be specified in these instructions. This maintenance plan is an example for standard applications. and does not provide any warranty or binding template for individual installations. It serves only as a template and must be individually adapted to the actual conditions on site.

Maintenance task	Places/modes of operation	Recommended interval	Instruction for action / description
Cleaning Fixture Housing	Locations with high ambient pollution and dust (e.g. club & bar, restaurant, etc.)	Monthly visual inspection - necessary interval to be adjusted individually to the circumstances - but at least once a quarter or at the end of the Service Intervall Counter	Clean the outside of the headlamp housing by carefully wiping with a soft, clean, lint-free cloth moistened with a suitable cleaning agent if necessary. We recommend wearing clean cotton gloves.
	Locations with low ambient pollution and dust load (e.g. museum, gallery, etc.)	Quarterly visual inspection - Necessary interval to be individually adjusted to conditions - but at least once a year or at the end of the Service Intervall Counter	
Cleaning headlight front lens	Locations with high ambient pollution and dust (e.g. club & bar, restaurant, etc.)	Monthly visual inspection or if output is conspicuously low - Necessary interval to be individually adapted to circumstances - but at least 1x per quarter or at the end of the Service Intervall Counter	Clean the front lens on the front side of the lamp head by carefully wiping it with a soft, clean, lint-free cloth moistened with a suitable cleaning agent if necessary. We recommend wearing clean cotton gloves.
	Locations with low ambient pollution and dust load (e.g. museum, gallery, etc.)	Quarterly visual inspection or if output is conspicuously low - Necessary interval to be individually adapted to circumstances - but at least 1x a year or at the end of the Service Intervall Counter	
Inspection Zoom	Locations with high ambient pollution and dust load (e.g. club & bar, restaurant, etc.) and/or very heavy use and/or continuous operation.	Quarterly function check of the zoom motor by driving the zoom slowly and quickly from 0-100%. Or at least at the end of the Service Intervall Counter	If Zoom runs sluggishly or makes unusual loud noises, contact an authorized service.
	Locations with low ambient pollution and dust load (e.g. museum, gallery, etc.) and/or with low load and/or partial operation.	Annual function check of the zoom motor by driving the zoom slowly and quickly from 0-100%. Or at least at the end of the Service Intervall Counter	

Inspection Pan & Tilt	Locations with high ambient pollution and dust load (e.g. club & bar, restaurant, etc.) and/or very heavy use and/or continuous operation.	Quarterly function check of the zoom motor by driving the pan and tilt motors slowly and quickly from 0-100%. Or at least at the end of the Service Intervall Counter	If the pan and/or tilt movement is sluggish, faulty, or makes unusual loud noises, contact an authorized service center.
	Locations with low ambient pollution and dust load (e.g. museum, gallery, etc.) and/or with low load and/or partial operation.	Annual function check of the zoom motor by driving the pan and tilt motors slowly and quickly from 0-100%. Or at least at the end of the Service Intervall Counter	
Cleaning fans and air ducts	Locations with high ambient pollution and dust load (e.g. club & bar, restaurant, etc.) and/or very heavy use and/or continuous operation.	Monthly visual inspection - necessary interval to be adjusted individually to the circumstances - but at least once a quarter or at the end of the Service Intervall Counter	Vacuum dust and loose particles from the outside of the radiator and the ventilation openings. Fix the cooling fan blades with a screwdriver, for example, to prevent them from rotating too quickly. We recommend wearing clean cotton gloves.
	Locations with low ambient pollution and dust load (e.g. museum, gallery, etc.) and/or with low load and/or partial operation.	Quarterly visual inspection - Necessary interval to be individually adjusted to conditions - but at least once a year or at the end of the Service Intervall Counter	
Readout of the device an lamp hours	All locations	Check the accumulated operating hours at regular intervals, at least every six months, and carry out the appropriate recommended action.	After Service Timer is approached a service must be carried out by an authorized service partner
Reading the error codes	All locations	Check at regular intervals, ideally daily, whether the fixture reports error messages via RDM. Respond according to the error code.	Contact an authorized service partner for this.