Instruction Manual

X4 atom

Head

from software version: 8

GLP
GERMAN LIGHT PRODUCTS
since 1994

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www.glp.de

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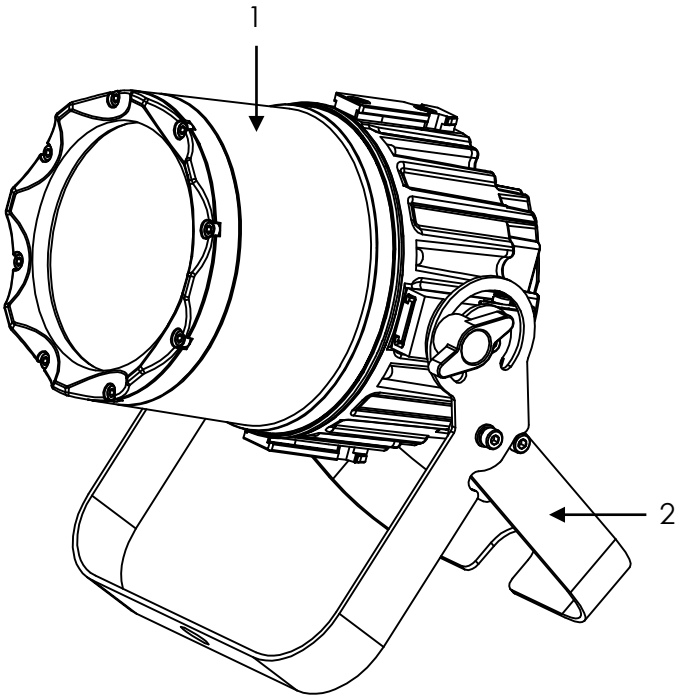
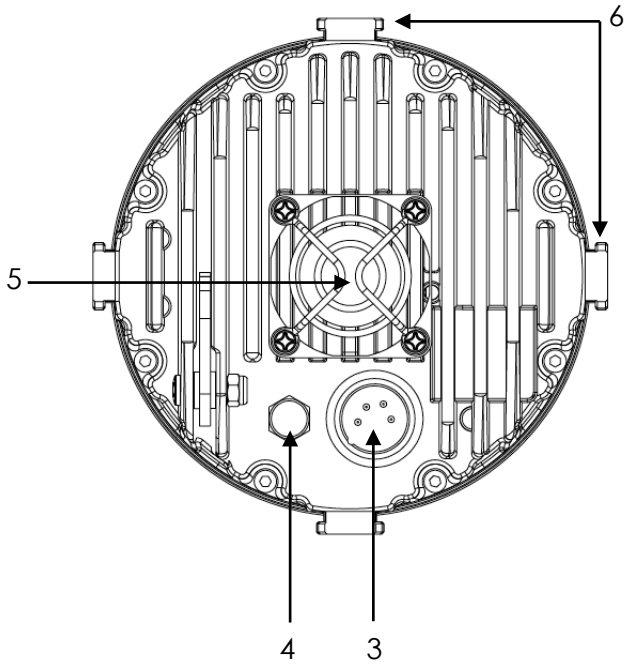
1 Description of Device



1. X4 Atom head (actively and passively cooled)
2. detachable and adjustable yoke / floor-stand

Rear view:



3. Power & Signal input
   (XLR 4pin connect to Atom PSU only!)
4. Vent plug
5. Fan
6. 4 x Socket for ATOM Connector and/or yoke

2 Safety Instructions

The **X4 ATOM** is a High-Tech Product.

To guarantee a smooth operation, it is necessary to respect the following rules. The manufacturer of this device will not take responsibility for damages through any disregard of the information provided in this manual. Warranty claims also will be voided in the case that the fixture housing is opened.

Never look directly into the beam of light or into the LED.
Attention: LED Class 2M can cause injuries of your eyes even without optical instruments in front of them or within a distance of less than 0.5m and short exposure time.
Hence: Avoid direct radiation into your eyes!

WARNING:

Never let optical parts come in contact with alcohol, solvents or similar cleaners.

1. Before powering on the fixture, make sure that the fixtures fans and air inlets are clean and not blocked.
2. A safety distance of at least 0.5 m must be maintained between the fixture and any easily inflammable material (e.g. decoration material).
3. **Attention!** Don't touch the fixture during the operation. This can cause injuries and/or damages.
4. **The fixture doesn't contain any user serviceable parts. Opening the fixture will void all warranties.**
5. It is necessary to wait at least 15 minutes after disconnecting the mains power before handling the fixture. Pay attention to possible hot parts of the fixture.
6. To ensure safe operation, follow also the Installation guide described in the chapter below. Operating the **X4 ATOM** without suitable safety aids like Safety cables or clamps/hooks can increase the risk of an accident and must be avoided.
7. Repair, maintenance, and installation work shall be done by qualified or GLP certified staff only. You need to pay attention to the common rules of technology that are not explicitly mentioned in this manual.
8. Use only original GLP spare parts. Any structural modification of the system will terminate all warranty claims.
9. Please keep this instruction manual for future reference.

Important Safety Information

The **X4 ATOM** fixture from GLP is fitted with a plano-convex lens. This type of lens can act as a strong magnifying glass.

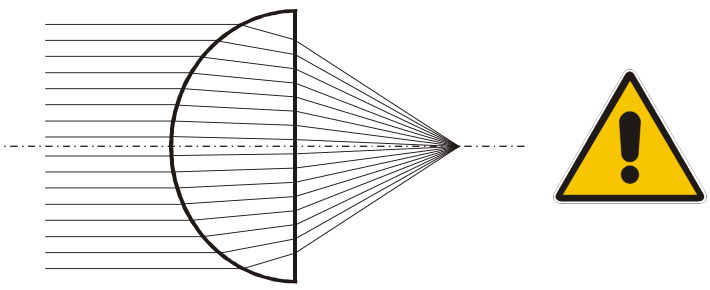
If the rays from a strong light source (such as the sun or another lighting fixture) are directed towards the front of any of these fixtures, then internal damage may occur. In a worst case scenario with a high power light source this can happen very quickly, damaging the fixture internally, potentially melting components or causing an internal fire within seconds.

In order to avoid these possible problems please adhere to the following requirements:

- **Do not expose the front of a fixture to direct sunlight or any other strong light sources.**
- **For outdoor applications during daylight make sure that the front face of any fixture is either shielded or points away from the sun, even when fixtures are not in use.**
- **Do not modify the front glass or lens of any fixture.**

These requirements have to be followed regardless of whether a fixture is powered on or off as the magnifying effect is an optical effect and therefore independent from the (electrical) state of the fixture.

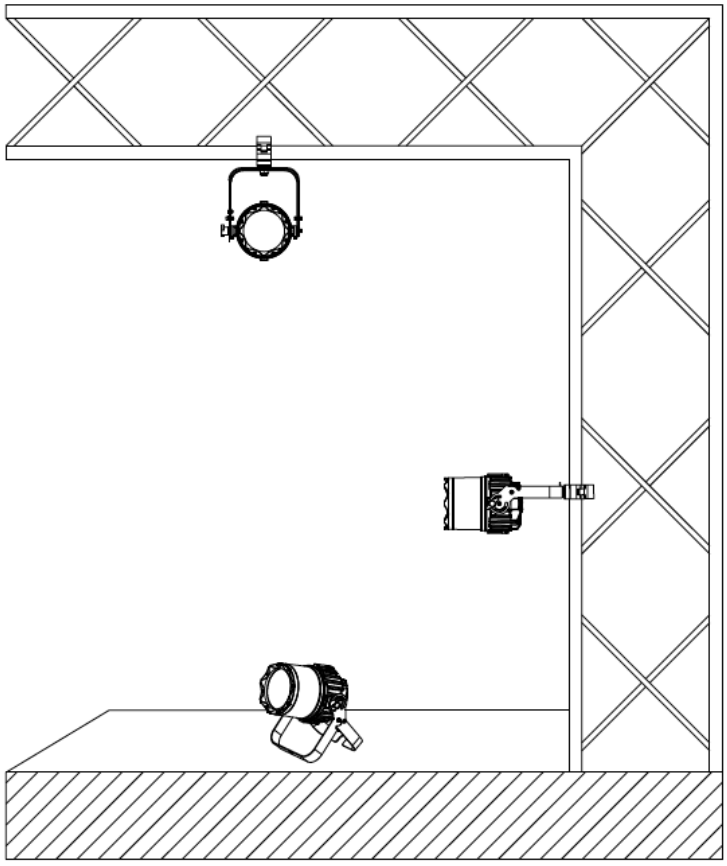
Especially when working with high powered **beam-lights**; extreme caution and observance of these safety instructions is mandatory.



Should you have any questions about the operation of your fixture then please contact your local GLP office, or their authorized distributor, a list of which can be found at www.glp.de.

3 Mounting

The **X4 ATOM** is fully operational whether it hangs or is mounted to the wall. It can also be operated while standing on the floor. Keep a safety distance of min. 0.5 m towards any easily inflammable materials (decoration etc.).



Pay attention to the regulations of: BGV C1 (former VBG 70) and DIN VDE 0711-217.
The installation shall be done by qualified staff only.

For the various mounting positions of the **X4 ATOM** (standing on the floor, sideways or hanging) different accessories kits are available. Through this a safe and firm installation is assured. You'll find dedicated connectors on each side of the fixture which should be used.

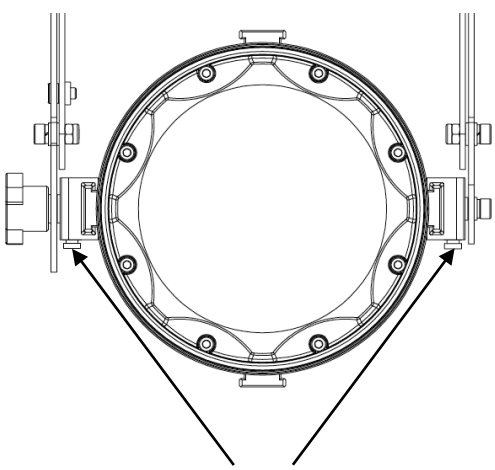
3.1 Operating on the Floor (Upright)

The **X4 ATOM** can easily be fitted with the included floor-stand which allows a stable standing of the fixture.

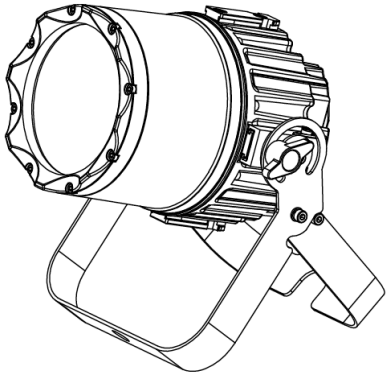
It is fixed to the Atom head by simply sliding it into two opposite connector sockets on any side of the fixture. Make sure so secure them both with the latch.

To release it again press the buttons to open the latch and slide the connectors out of the sockets.

An additional securing is usually not required. Please pay attention to an even and gripping surface.



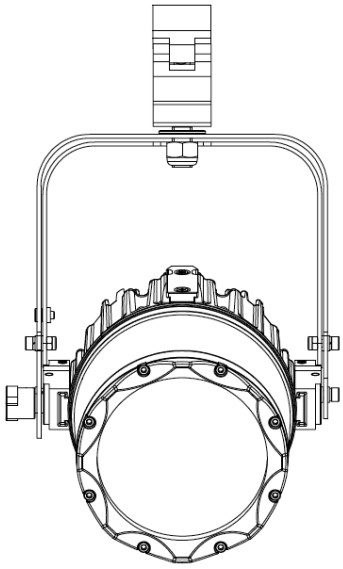
Buttons to release the latch



3.2 Mounting in a single hanging or sideways position

To operate one **X4 ATOM** in a hanging position please use the dedicated yoke supplied with your fixture. And attach it to the fixture as described above.

Use a half-coupler (clamp or hook) to hang the fixture from a dedicated truss



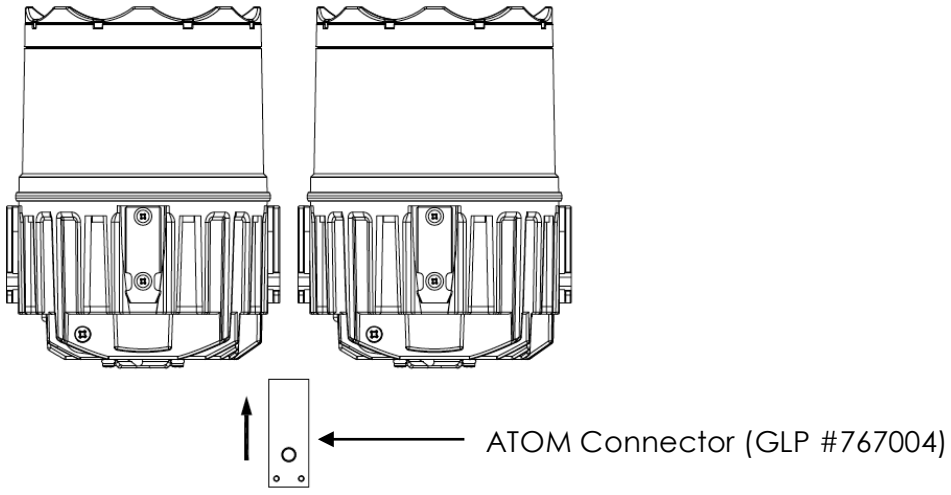
3.3 Mounting in a multiple array or matrix setup

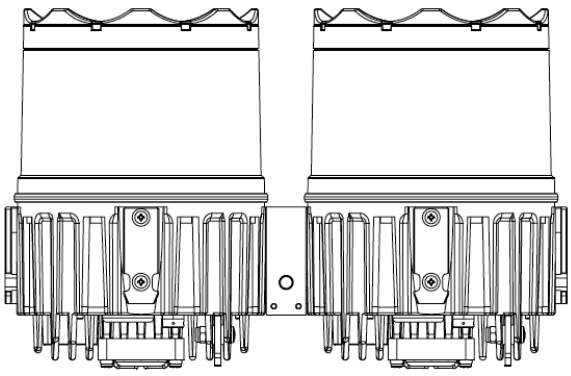
Multiple **X4 ATOM** can be fixed together using the included ATOM connector.
The ATOM connector is fixed to the Atom head by simply sliding it into one of the four connector sockets on each side of the fixture.
Make always sure so secure it with the latch.
By connecting another **X4 ATOM** to the other side of the ATOM Connector you can build pairs/quads/lines/matrixes, etc.

To release it again press the button to open the latch and slide the connector out of the socket.

Note:
You can vertically hang a total of up to 12pcs. X4 ATOM underneath.

For more rigging Accessories please see the section 5 (Accessories) below.

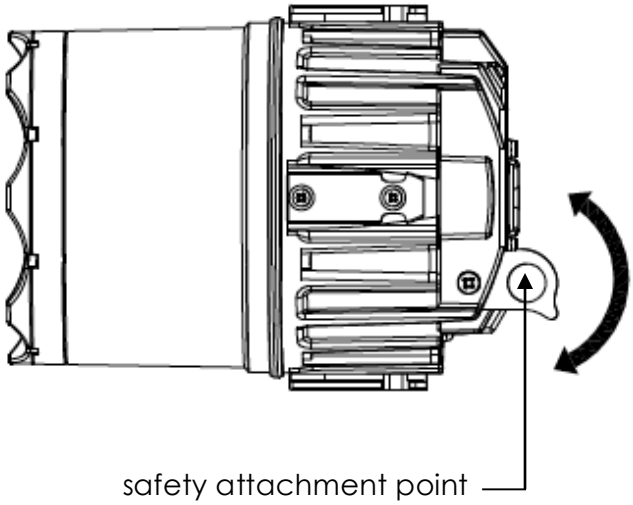




3.4 Securing the Fixture

Regardless of the mounting method of the **X4 ATOM** you'll have to use a stipulated safety wire. Attach the safety wire through the attachment point at the back of each fixture.
The safety attachment point can be deployed by simply swinging it out from the back as shown below.

Pay attention to a safe and proper fastening. The safety cable must comply with BGI 810-3 (EN 60598-2-17 Section 17.6.6) and be capable of bearing a static suspended load that is ten times the weight of the fixture and all installed accessories.



4 Connections

4.1 Connect to the X4 ATOM PSU

4-pin XLR connector / Connected load 20 VA (W) per head.
Pin 1 = [Ground] / Pin 2 = [Data +] / Pin 3 = [Data -] / Pin 4 = [V+ 24V]

Do not exceed 60m / 200ft. cable length for the input.

Do connect the **X4 ATOM** to an **X4 ATOM PSU** only.

The following models are compatible with the **X4 ATOM:**

- GLP# 767001 X4 ATOM PSU 12
- GLP# 767002 X4 ATOM PSU 6

Note:

For further details and instructions on the connection and use of the **X4 ATOM PSU** please refer to the related manual of either fixture.

Attention:

Connect the X4 ATOM only to an X4 ATOM PSU.

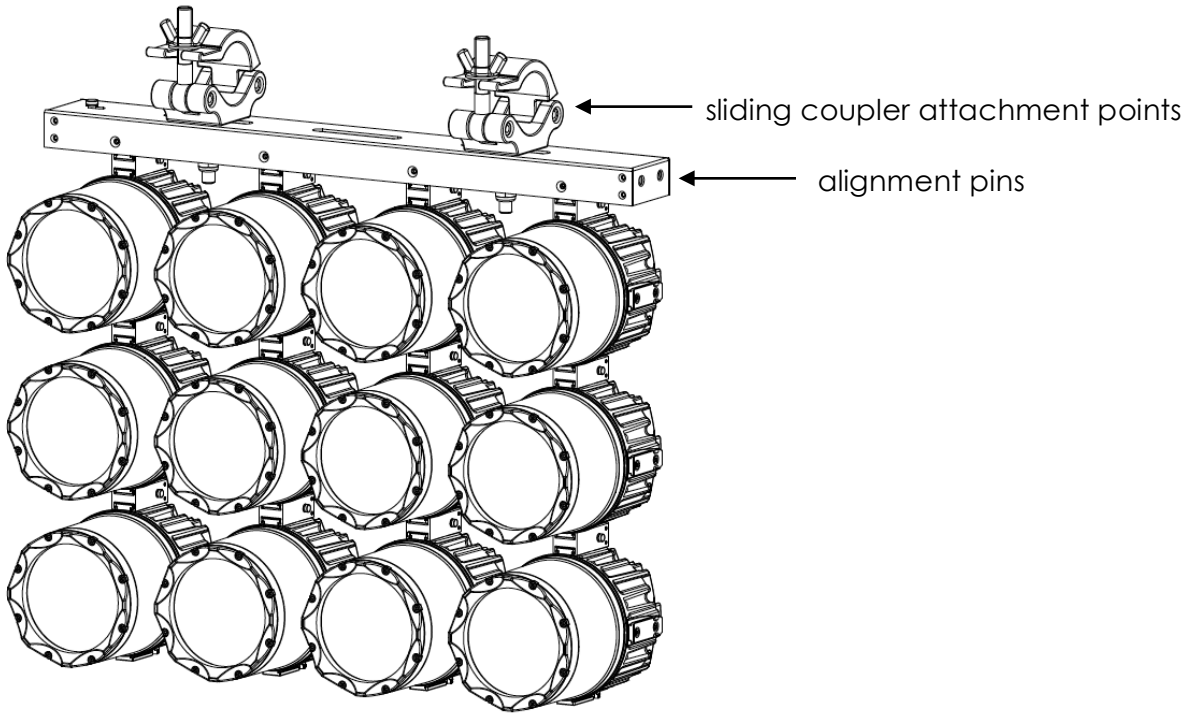
Never connect the fixture any other device as this may damage the fixture.

To ensure the IP65 rating of the Atom head you must use an IP65 rated XLR female connector:
i.e. NEUTRIK® X-HD Series

5 Accessories

5.1 Atom Trussbar

The X4 ATOM Trussbar (GLP #767005) can hold 4 columns of **X4 ATOM** which can simply be connected using an ATOM Connector. Several fixtures can then easily combined to a matrix or other setups.
The X4 ATOM Trussbar features sliding coupler attachment points to fit between the bracing of any Truss and has alignment pins at the sides to ensure a perfect combination of multiple X4 ATOM Trussbars.



6 Maintaining and Cleaning

The **X4 ATOM** is a fixture of very low maintenance. It is only necessary to clean the air inlets and outlets as well as the optical LED lens from time to time. For safe operation it is absolutely essential that the fixture is kept clean and that dust, dirt and smoke-fluid residues must not build up on, or within the fixture. Otherwise the fixture's light-output will be significantly reduced or damages can occur. Regular cleaning will not only ensure the maximum light-output, but will also allow the fixture to operate reliably throughout its life.

A soft lint-free cloth moistened with any good glass cleaning fluid is recommended to clean the lens.

Attention:

Under no circumstances should alcohol or solvents be used to clean the lens!

6.1 Safety regulations

- **Disconnect the fixture from the PSU!**
- **Wait min. 15 minutes after disconnecting power to allow the fixture to cool down.**

6.2 Maintenance and Interval (rule-of-thumb)

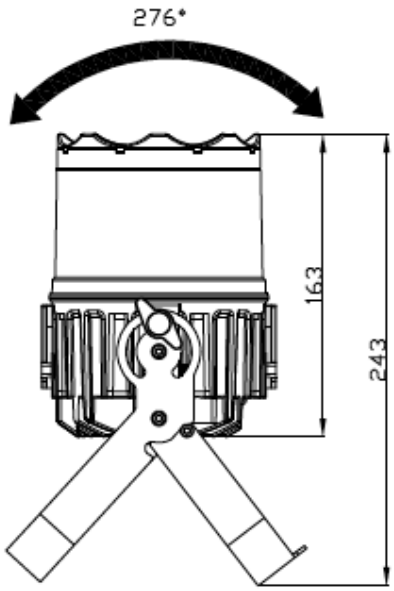
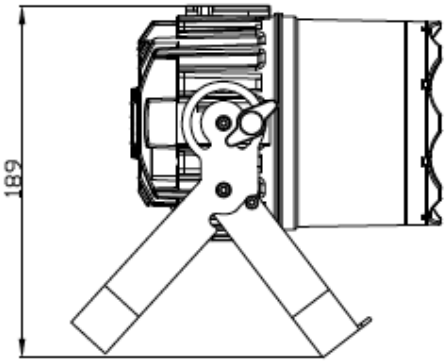
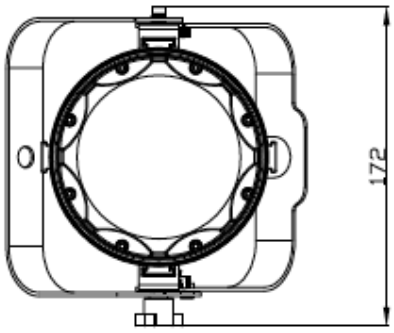
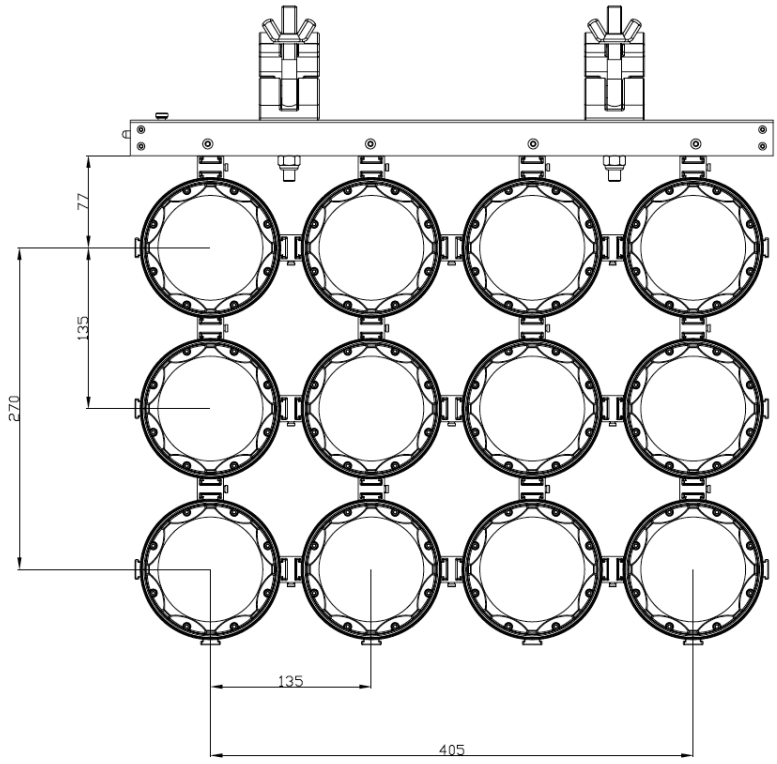
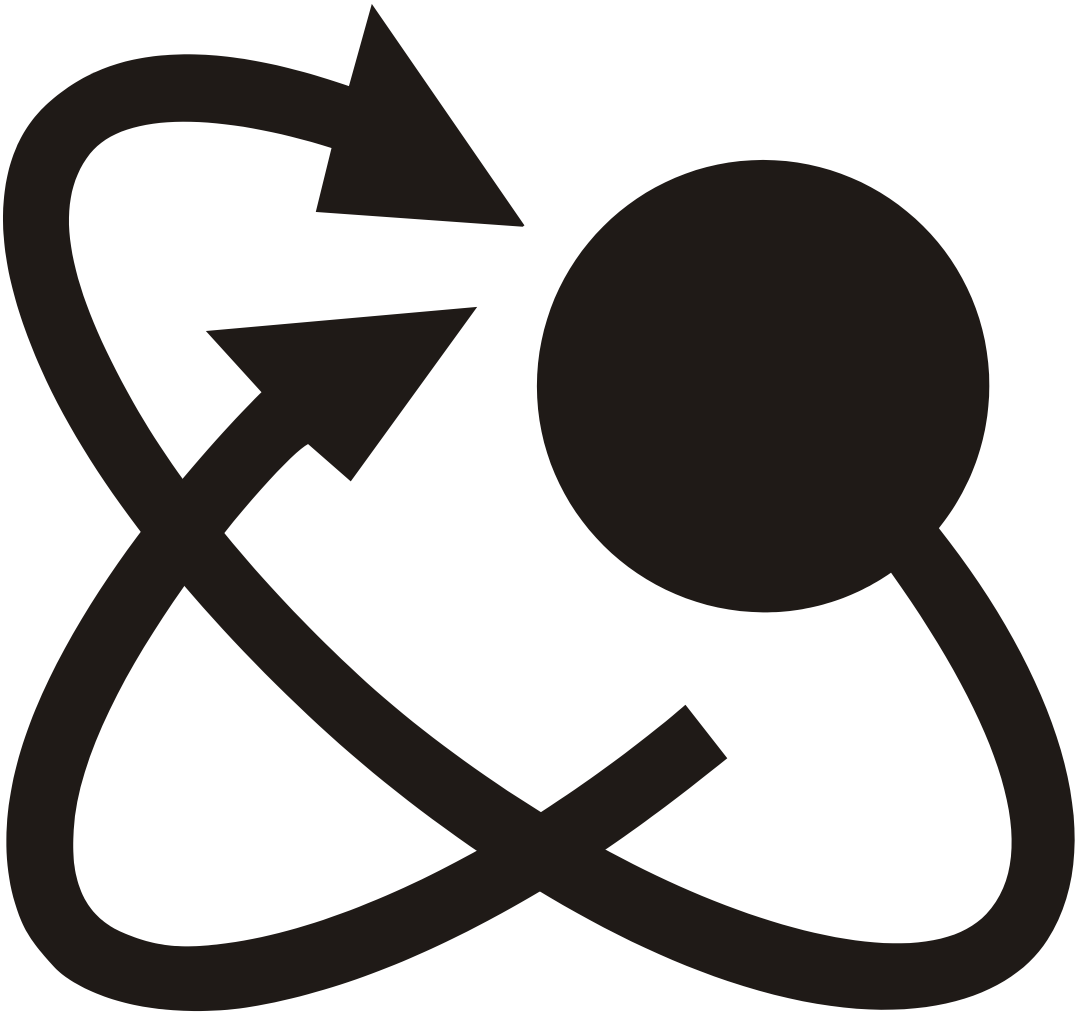
The contamination of the fixture depends on the environment details. Hence no general guidelines can be given. The intervals given below are only suggestions from our experience.

Position	Interval	In this way
Lens aperture	weekly	soft brush /lint-free cloth
Fan and air channel	monthly	vacuum cleaner, airbrush, etc.

Attention:

- **Never let optical parts come into contact with oil, fat, alcohol or similar solvents.**
- **Before running the fixture wait until all parts are dry.**
- **Never touch lens with bare fingers.**

7 Technical Specifications:

Power supply	
Power consumption	25 VA (Watt)
Power & Signal Input	1 x 4-pin XLR: Power (24V) & Signal (RS-485) from X4 Atom PSU: Pin 1 = [Ground] Pin 2 = [Data +] Pin 3 = [Data -] Pin 4 = [V+ 24V]
Max. cable length from PSU	60m 200ft
Operational Parameters	
Max. Ambient Temperature	5° - 45°C (integrated overheating switch) 40°-113°F
Protection	IP 65 rated (only if connected with IP65 rated XLR connector)
Mounting Position	Any (see relevant chapter in the manual)
Lighting System - Additive Color mixing	
LED Type	1 x Osram Ostar RGBW multi-chip
Lifetime	50,000 h
Wavelength optimized for maximum presentable color space	
Optical System	
Full RGBW / High efficiency lens system for maximum output	
Shutter / Dimmer	
Strobe- Effect with variable speed between 1-10 flashes per second Random- & Pulse-Effects	
Continuous Dimmer 0 - 100%	
Zoom	
3.5 to 34 degree continuous high speed zoom	
Weights and Measures	
Length	**127 mm / 5´´**
Width	**127 mm / 5´´**
Height	**169 mm / 6.63´´**
Weight (net)	**1.4 kg / 3 lbs.**
Length (with yoke)	**127 mm / 5´´**
Width (with yoke)	**178 mm / 7´´**
Height (with yoke)	**248 mm / 9.75´´**
Weight (with yoke)	**1.8 kg / 4 lbs.**

8 Dimensions