



Maintenance and cleaning instructions UnityColor® Standard Light Luminaire

Introduction:

The calibration of the luminaires with the help of a high-quality spectrometer which must be certified annually is a complex process. A technician's job often exceeds the value of a new tube set over many times.

With this maintenance and cleaning manual, the customer can clean the lights themselves and use his new tubes. Thus, the lamp is up to date, almost like new.

Since a fluorescent lamp in standard lighting fixtures can be used over the course of its life by burning time and by frequent switching a maximum of 2500 hours, an annual exchange or existing hour meter after a maximum of 2500 hours is urgently recommended. Even with low use, the cleaning of the tubes, reflectors and windows must be performed every year. The normal fitting already alters the spectral radiation and thus also the color temperature and the color rendering of the entire luminaire.

Simple measurements can often be done by yourself:

Should the company have a lux meter, perform a lux measurement on the center of the work surface immediately after cleaning and inserting the new tubes. Note measuring point and measured value with date on a list. This measurement can be repeated 2 to 3 times a year. If the lux value decreases by more than 15%, clean and replace tubes.

Turn on daylight tubes 10 minutes before each measurement or color check. When using new tubes, allow each type of tube light to „burn in“ at least 8 hours before the measurement or initial color test (not halogen or LED).

Using the example and with pictures of the type X-III with 3 types of light and 230 W halogen lamps we show the cleaning of the lamp.

Carefully vacuum the top of the housings with a soft vacuum cleaner brush before cleaning.

Open the luminaire:

Switch off the main switch before opening ① any housing, pull out the plug for small systems.

Open both locks with the provided Allen key by quarter turn outwards, ②③ and hang the luminaire door on the securing band ④⑤.

Unhook the oval eyelet of the securing strap on the hook at the top of the light housing, lifting the light door slightly. Then carefully lower the luminaire door on the securing strap and let it hang down vertically.

Always hang the backup tape after completing the work!



Read completely before starting maintenance

Cleaning, required material:

Isopropanol 70% and lint-free cloths, soaked cloths in the resealable bag are well suited.

1 dry lint-free cloth or a dried alcohol cloth to install the tubes.

For the type X-III and X-IV, first remove the halogen lamps with the dry cloth and clean with the alcohol cloth.

Never touch halogen bulbs with your bare fingers, only with a glove or cloth.

Halogen lamps removal:

X-III: push both 230 watt halogen bars sideways into the spring of the holder and swing out downwards ⑥.

X-IV: remove all 12 pieces of 60 Watt halogen bulbs by pushing them upwards into the spring of the socket and turning them slightly.

Clean all halogen lamps with alcohol and set aside. Replace halogen bulbs in reverse order last after cleaning is complete.

X-II types do not have halogen lamps.

Fluorescent tubes removal:

Turn the tube by 45 ° and then pull it downwards out of the socket. Then slightly tilt the tube in the housing and carefully remove it downwards ⑦.

Clean tubes with alcohol wipe ⑧ and put aside or replace with new tubes.

Clean reflector surfaces with alcohol cloth ⑨, in the case of type X-III also in the halogen spotlight and the two cover plates of the fans next to the halogen spotlights. The mirrored reflector sheets must be clean and free of grease and streaks. Do not scratch the reflectors!

Tubes contain some mercury, do not breathe the dust when the tubes are broken.

Remove shards of glass and dust, clean surfaces.

Clean all light diffusion discs in the folded-down door on the smooth inside with alcohol cloth ⑩.

Insert new or cleaned tubes in the sockets in reverse order, always align the **inscriptions** of the tubes within a luminaire **on one side**. Observe the assembly plan supplied with the luminaire - **do not mix the light types**.

Retighten the securing strap, close the illuminated door and close the locks by turning them inwards.

Carefully clean the light diffusion discs from the outside on the rough side with alcohol cloth, do not press on ⑩.

Clean exterior surfaces of casings with alcohol wipe.

When using NEW tubes, set any available hourly meters to 0 depending on the type of light (see the manual of the system).

Dispose old tubes properly (e.g. recycling depot).

D65 tubes marked as UnityColor calibrated are delivered cleaned, 1 day burned in and calibrated.

Clean TL84 with isopropanol and burn in for 1-2 days.

