# Maintenance Guide

#### LAMPS

Replace the lamp ONLY with lamps specified by PL Light Systems. The use of other lamps may damage the product and lamp and will VOID the warranty.

#### High Pressure Sodium (HPS)

Under normal operating conditions, group relamping for High Pressure Sodium lamps is recommended after 10,000 hours of operation. Some lamp failure will occur before this recommended interval, and single lamp replacement should be considered where necessary.

#### Metal Halide (MH)

Metal Halide lamps depreciate in output much quicker than HPS lamps—group relamping is recommended after 8,000 hours of operation (under normal operating conditions). For every 1,000 hours, the useful light output decreases by 1%. After 10,000 hours, 10% of your light output has been lost, but you're supplying the same amount of electricity and lowering production.



**TIP:** Always wear cotton gloves when touching a lamp to avoid creating a dark spot on the bulb from the oils on your skin.

## CAPACITORS

Over time, a capacitor's ability to sustain and balance power will decrease. This can cause problems with tripping breakers and conductive heat issues. An imbalance in power can be a source of light loss and therefore, production loss. Capacitors should be replaced every three (3) lamp changes or 25,000 – 30,000 hours. Their values have likely declined more than 11 to 15%.

P.L. Light's LightCare testing facility can measure your capacitors and provide an analysis as to whether replacement is necessary.

### REFLECTORS

Although you may not be able to see depreciation in light levels, your reflectors may be blocking as much as 10% or more of the light generated from the lamp. Lower light levels and uniformity will reduce your crop production and quality. Using our goniophotometer, P.L. Light can scientifically measure the efficiency of your reflector and provide a useful analysis as to whether a thorough annual cleaning or replacement is necessary.

Another contributing factor is the age of your reflectors. You may be able to gain an increased amount of reflectivity just by upgrading. For example, upgrading to a Delta reflector from a Midi will increase your reflectivity by 4-6%.

Regular cleaning of reflectors is essential for optimal lighting performance. Your reflectors need to be cleaned at a minimum every two to four years, but every year is highly recommended.

## CLEANING INSTRUCTIONS



A reflector can be cleaned with a 1:100 vinegar to water solution. Dip the reflector in this solution for a few seconds.



If necessary, rub lightly with a fine fingernail brush to loosen the dirt. Once the dirt is loosened, rinse the reflector in distilled water. Rinse the reflector once more in distilled water.



Hang to air dry. Once dry, if there are still heavy deposits or anything that cannot be removed, it is time for them to be replaced.

**NOTE:** For your safety, when cleaning reflectors, always maintain the correct ratio and never add other chemicals to solution. Wearing hand and eye protection is advised.



# Maintenance Guide

#### LUMINAIRES

Always disconnect the luminaire from main power source before performing any maintenance

Always allow for a cool down period of at least 30 minutes before touching the lamp or reflector. Touching the lamp or the reflector when the lamp is lit, or immediately afterwards, will result in severe burns!

Do not use the luminaire when either its lamp or its power cord are damaged. Replace the power cord only with original certified cords.

Do not expose the luminaire to:

- condensing humidity, heavy mist, fog or direct spray;
- (ambient) temperatures outside the specified range;
- dust and contamination;
- direct sunlight during use or HID light that could heat up the ballast.

## CLEANING INSTRUCTIONS

Check the product at regular intervals for build-up of dust and dirt. Clean the product if necessary. Contamination can lead to overheating and reduced performance.



Never clean the luminaire with corrosive cleaning agents, abrasives or other aggressive liquids.

Clean the housing with a dry or slightly damp cloth.



Only use a vinegar and water solution (1:100 ratio) to remove build up of limescale on the lens.

**NOTE:** For your safety, when cleaning luminaires, always maintain the correct ratio and never add other chemicals to solution. Wearing hand and eye protection is advised.



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