

# Maintenance Guide



## IMPORTANT

Before commencing any maintenance work:

- Always turn off and lock out the branch circuit
- Ensure luminaires are completely cooled

### LAMPS

For every 1,000 hours burning hours, the useful light output of your lamps decreases by 1%. So, be sure to follow the recommended re-lamping schedule as specified for your particular lamps used. We typically recommend group relamping as part of your regular maintenance routine. (This can be staged to spread the financial cost—your P.L. Light Systems sales manager can work with you to develop a re-lamping strategy.) Note that some individual lamp failures may occur before this recommended replacement interval, so single lamp replacement should be considered where necessary.

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



**TIP:** Always wear cotton gloves when touching a lamp to avoid creating dark spots on the glass from 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, by which stage, their values have likely declined more than 11 to 15%.

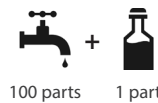
### REFLECTORS

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.

Another contributing factor is the age of your reflectors.

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.

### REFLECTOR CLEANING INSTRUCTIONS:



100 parts      1 part

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



nail brush

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.



air dry

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



## IMPORTANT

### LUMINAIRES

All P.L. Light Systems' luminaires are designed (and rigorously tested) to provide the specified level of protection against moisture ingress in accordance with their certified IP rating according to IEC-60529 standards.

However, the real-world operating conditions within a horticultural environment are often more demanding than those specified under IEC-60529, which does not account for all potential effects of humidity, airborne pollutants and/or UV exposure within the CEA facility. As such, growers should take the following precautions to protect their luminaires against potential water ingress:

- Luminaires should ideally be removed from mounting structure when cleaning ceiling / walls of facility. If that's not possible, luminaires should be properly bagged to protect from ingress of any water / cleaning agents
- Ensure that all connectors on the luminaire are capped when not in use to ensure safe operation and maintain IP integrity.
- Do not expose the luminaire to:
  - » condensing humidity, heavy mist, fog or direct spray of any pressure level;
  - » (ambient) temperatures outside the specified range;
  - » dust and contamination.

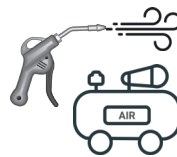
Never use a luminaire if either the lamp or power cord are damaged. Replace the power cord only with original CSA or UL equivalent certified cords.

Before commencing any maintenance work:

- Always turn off and lock out the branch circuit
- Ensure luminaires are completely cooled

### LUMINAIRE CLEANING INSTRUCTIONS

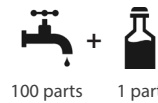
Check the product at regular intervals for build-up of dust and dirt. Clean the product if necessary. Contamination can lead to overheating and reduced performance.



Use low pressure compressed air to remove dust and/or debris between the heat fins on the driver housing and/or LED modules.



Wipe the luminaire housing down with a dry or slightly damp cloth.



To remove the build up of limescale on the lens, dampen a clean, soft cloth with a vinegar and water solution (1:100 ratio). Gently wipe lens with dampened cloth.



Allow luminaire to dry completely before powering on again.

#### NOTES:

- 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.
- Never clean the luminaire with corrosive cleaning agents, abrasives or other aggressive liquids.
- Any luminaire maintenance should always be performed in accordance with local and national building; electrical and/or safety codes.

