

# **NIGHT-SAVER™**



***High-Low Dimming System for  
High Intensity Discharge Lighting  
from MJB Technologies and  
Allanson International***

# **NIGHT-SAVER™**

... is the world's first micro-chip clock controlled, independently operated HID dual-level switching control for roadway and area luminaries.

Energy costs amount to **70%** of the total owning and operating costs of an outdoor lighting system. Roadway lighting systems are costly to purchase, install, maintain and to operate. Most roadway authorities are mandated to reduce their operating costs. If saving energy, or energy costs, or reducing sky-glow is your goal, then **Night-Saver** is the answer.

By operating **Night-Saver** 7 hours every night at 40% or more power reduction, you can save over 25% of your overall lighting power costs.

Roadway traffic has its peaks during the rush hours and its low levels between 11:00 pm and 6:00 am. This is the opportune time for dimming, for saving energy and for helping to save the night sky.

If there is a concern that changing roadway lighting levels is possible or even allowed and there are liability and public safety issues, we refer to the Illuminating Engineering Society of North America (IESNA) Roadway Lighting Guide RP-8-00 (Reaffirmed 2005). The IESNA allows for three levels of lighting depending on the degree of vehicle pedestrian conflict: **High**, **Medium** and **Low**.

If your lighting was initially designed to the **High** level you can dim the lighting by up to **50%**. If your lighting was initially designed to the **Medium** level you can dim the lighting by up to **33%**.

A single 400-watt high pressure sodium luminaire can save over 500 kilowatt hours of power in one year; a 250-watt luminaire can save over 322 kilowatt-hours, a 200-watt can save 260 kilowatt-hours and a 150-watt can save 205 kilowatt hours of power by dimming at 42% seven hours each night.

Multiply these savings by the number of luminaries that you can dim in your lighting system and the power savings are substantial.

Saving energy is an important element in reducing roadway lighting costs.

# NIGHT-SAVER™

... can help you to control your roadway operating costs by saving over **25%** on your lighting energy.

**Night-Saver** is installed in each roadway luminaire that is to be dimmed. There is no wiring between luminaries or to a central control. **Night-Saver's** timer control switches the HID ballast from its full output to a pre-determined reduced setting. It requires no servicing and it will operate for over 20 years. Proven Hi-Low dimming of HID lamps through capacitance reduction has been a practical way to save energy with indoor lighting for decades. Now, MJB Technologies has taken this technology outdoors where long distances between poles make low voltage control too costly and impractical.

There are over 2 million roadway light fixtures in Canada. If we dim just half of them we could save over 220 million-kilowatt hours per year. This would save 66 thousand metric tones of CO<sub>2</sub> emissions each year.

The payback in energy is obvious. The payback in saving the environment is incalculable. The reduction in corrosion, saving in health costs due to cleaner air and the benefits from a cleaner sky are also immense.

Illuminated parking areas are great applications for **Night-Saver** as there is a significant change in activity between the early evening and late night hours. No need to retrench for control wiring with **Night-Saver**. It is designed to be compact enough to fit into almost every outdoor luminaire. And with **Night-Saver**, you can be sure that your lighting distribution will remain the same when dimmed.



Night-Saver is simple, compact and easy to install into most outdoor luminaries.



Night-Saver saves energy as well as the night sky.

**Save Energy**  
**Minimize light trespass**

**Reduce offending glare**  
**Reduce sky glow**

# **NIGHT-SAVER™**

**Sky-Glow** is created when stray light illuminates the night sky. The International Dark Sky Association promotes less light intrusion into our nighttime sky. In addition to the loss of our ability to see the stars at night, certain forms of plant and animal life are altered by not having complete light-dark cycles each day.

**Light Trespass** occurs when stray light from a neighbor's porch light or a roadway luminaire projects where it shouldn't, on private property and into bedroom windows. Living next to a shopping mall or a sports field may be an example of this.

**Offending Glare** occurs when the beam of light from a fixture is aimed into the eyes of someone who isn't performing the task for which the lighting was originally designed. It can reduce vision. This can be dangerous.

## ***Night-Saver's Features and Benefits:***

- Individually installed and independently operated in each luminaire.
- No control wiring between luminaires and a central control.
- **Night-Saver** works independently of luminaire's power supply.
- Available for up to 400 watts HPS and metal halide CWA and CWI.
- New capacitor adds fifteen years to the life of the ballast.
- Programmed at the factory to eliminate field errors or tampering.
- Saves up to 42% in energy while operating.

## ***Night-Saver Specifications:***

- 120 v, 208 v, 240 v, 277 v and 347 v AC supply.
- For indoor systems as well as roadway and outdoor lighting.
- Fails to the full light output mode of operation.
- Draws 1.2 watts of power.
- Operates in - 30 degrees to + 40 degrees C ambient.
- Control module weighs 300 grams.
- Control module measures 40 mm x 80 mm x 130 mm.
- Accepts low voltage DC signal input for timer by-pass control.
- Canadian Standards Association tested and approved.
- Full 2-year Warranty.

**Night-Saver** is designed and produced by:

**MJB Technologies**, 15380 Centreville Creek Road, Caledon, Ontario, Canada, L7C 3B2 and Allanson International, Toronto, Ontario, Canada.

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And visit our website at: [www.night-saver.com](http://www.night-saver.com)