



# Dynadimmer

Providing greater efficiency with an easy, stand-alone, dimming control.

**PHILIPS**  
**LUMEC**



# Dynadimmer



---

**Providing greater efficiency with an easy, stand-alone, dimming control.** / In the face of modern challenges such as global warming and increasing energy costs, Philips Lumec is proud to offer a simple stand-alone solution to reduce the power consumption of outdoor LED luminaires in a variety of preset or custom scenarios, allowing cities and organizations to project a greener image and save energy while ensuring everyone's security and creating an inviting nighttime environment.

## Safety

### **Keeping light where and when it is needed.**

The advanced photometric performance of our luminaires directs light where it is needed and the Dynadimmer will take care of the schedule. It is highly flexible and will adapt to any scenario, offering optimal light output during the entire night, whatever the need may be.

### **Making light comfortable and safe.**

While LEDs are already known for their energy efficient white light, the Dynadimmer is a new way to save even more energy by simply lowering the output of a luminaire. The light will still be kept to a chosen safe and uniform level, providing a more comfortable environment when full output is not required. Dimming is carefully scheduled at levels that meet the IES requirements and can be brought back to full power at any time.

## Flexibility

### **The Dynadimmer is made to answer the needs of the most common to the most specific applications.**

When ordered, it is pre-programmed by Philips Lumec with scenarios that meet your geographic requirements, or it can come as a fully customizable unit. In both cases, it allows for secure and reliable light dimming in residential, roadway, parking and industrial applications.

### **Countless possibilities and continuous adaptability.**

Simple PC-based and user-friendly software can be used to modify the schedules, and a sturdy handheld tool is available as an option to re-program your units on-site. If needed, the Dynadimmer can be ordered fully customizable to suit the needs of more specific applications. Dozens of different combinations are possible to optimize the use of light and to maximize nocturnal comfort in any given situation, at any time.

# Dynadimmer's features make it ideal for many applications

The Dynadimmer is a highly flexible stand-alone programmable dimming module that can answer the needs of very specific applications while ensuring safety and reliability by respecting light level requirements.

## \\ Qualifying for LEED credits

The Dynadimmer can be used to adjust the light to a very specific level in order to obtain LEED Innovation Points or simply to save energy. For example, when the lighting requirements for a specific area are in-between two available luminaire wattages, a Dynadimmer can be used to dial down light output to produce the exact target light levels required.

## \\ Combined with motion sensors

An override function built into the Dynadimmer allows a luminaire to instantly return to full light output at any time and go back to its programmed scenario afterwards. This feature used with a motion sensor helps reduce energy consumption but will also ensure maximum safety when there is site activity.

## \\ Extending the life of a luminaire

Because LEDs run at lower temperatures when they are dimmed, the Dynadimmer can prolong the life of a luminaire well over our LED engines normal lifespan. Besides, better longevity also means less maintenance and a lower cost of ownership.



## Features

## Benefits

Pre-programmed dimming schedules	→	Luminaires comes ready-to-use, requiring no further modification or programming
Reduces power consumption	→	Allows for energy savings of up to 50%, lowering CO2 emissions and energy bills
Respects IES requirements	→	Dimming is done seamlessly, always keeping light to a safe and comfortable level
Free programming software**	→	The schedules can be modified at any time if needed with an easy-to-use software*
Environmentally-friendly solution	→	Projects a green image that attracts citizens and investors
Time calculation based geographical location	→	Guarantees lighting schedules are adapted to local needs
Override function	→	Makes it possible to go back to full power at any time via an optional motion sensor without having to reprogram the unit

\* Optional USB cable required

\*\* Can be downloaded freely from Philips Lumec website: <http://www.lumec.com/products/controls/dynadimmer.html>

## \\ Preserving the environment

The Dynadimmer is a responsible solution for any project that aims to lower its ecological footprint. It is proof that light levels can be reduced without compromising safety and security.



## How does the Dynadimmer work?

---

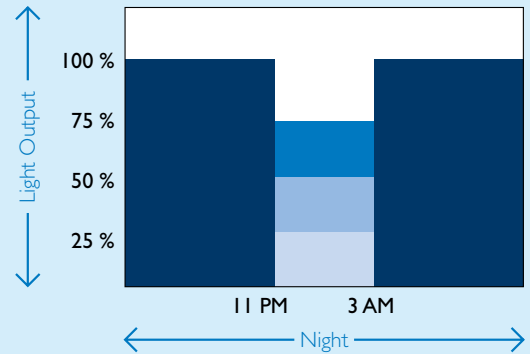
**The Dynadimmer is an ingenious solid state device built inside a luminaire that automatically adjusts light level according to preset scenarios. Its precise operation and high adaptability make it a simple and reliable solution.** / It is designed to interact with Philips Advance 0-10V dimmable drivers and also compatible with any other dimmable drivers with a standard 0-10V interface. The Dynadimmer's schedules are based on the geographic location of an installation to insure that lighting and dimming are adapted to local time. Once it is installed, the Dynadimmer will take two nights to calculate the duration and consistency of its cycle and will then start to operate normally on the third night.

# Philips Lumec Standard Scenarios

**Philips Lumec is the only manufacturer to offer the Dynadimmer with pre-programmed scenarios to suit many applications and geographic locations while respecting lighting norms.** / Because every city has different night lengths and weather conditions, the engineers at Philips Lumec meticulously studied data gathered by the NASA to prepare realistic and safe dimming schedules. They allow for maximum energy savings in a multitude of applications while offering safe and dependable lighting when it is needed.

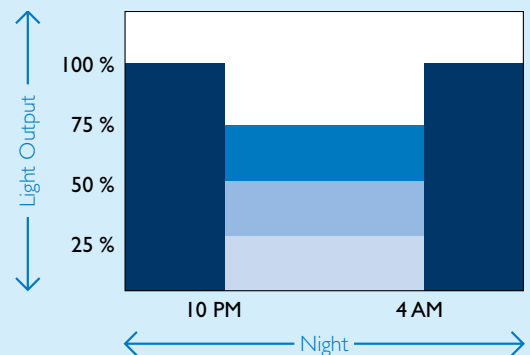
## 4H \\ Safety

This scenario focuses on safety by dimming during a limited period of time. Decreases light level by 25, 50, or 75% during 4 hours. Can be modified later by the end-user.\*



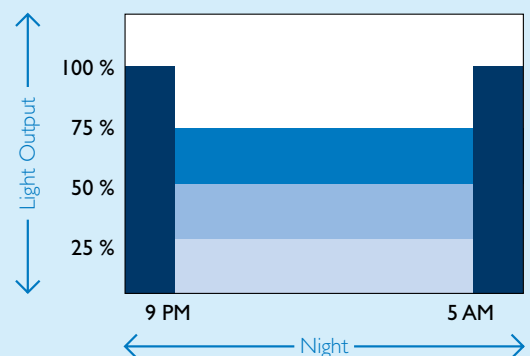
## 6H \\ Median

This scenario provides an ideal balance between illumination and energy savings. Decreases light level by 25, 50, or 75% during 6 hours. Can be modified later by the end-user.\*



## 8H \\ Economy

This scenario maximizes energy savings by dimming during a longer period of time. Decreases light level by 25, 50, or 75% during 8 hours. Can be modified later by the end-user.\*



## P \\ Programmable - custom scenarios

The Dynadimmer can be ordered without any pre-programmed scenario for more specific applications. The unit can be easily programmed by the end-user\*, allowing up to 5 time periods and 5 dimming levels, from 100% to 5% of total wattage.

\*With optional USB cable and free programming software.



## Dimming levels and IESNA recommendations

**The standard scenarios developed by Philips Lumec respect the light levels recommended in IESNA RP-8-00.** / Light must be maintained at a certain level to ensure traffic safety as well as pedestrian security. Our scenarios were modeled according to recommendations made by the Illuminating Engineering Society of North America (IESNA) and provide secure, comfortable, and uniform lighting at all times. The Dynadimmer can even be easily reprogrammed to adjust to new or revised standards in the future.



## A complete, simple, and adaptable solution

**The Dynadimmer represents a highly advanced solution that can be easily integrated into a wide range of luminaires, for many lighting applications.** / The Dynadimmer offers many innovative new ways to preserve the environment, reduces energy costs, and harmonizes lighting to human needs. It is flexible enough to suit the requirements of almost any imaginable project and can optimize the lifespan of luminaires while making the surroundings safer and more comfortable. Furthermore, Philips Lumec has developed scenarios based on geographic locations and IES recommendations that can be pre-programmed into the Dynadimmer to make it even simpler to use and operate, while still keeping it programmable for future adjustments.

**The ideal partner for your outdoor lighting projects.** / Philips Lumec is a leader in outdoor lighting innovation, constantly developing high-end, sustainable solutions that respect the environment and answer the needs of a fast-changing industry thanks to its thorough expertise and know-how. Philips Lumec offers an exceptionally vast array of exterior luminaire styles that ensures the Dynadimmer's complete integration into any installation, whether classic, contemporary, architectural, or high-tech.

# Ordering Data

Scenario	Dimming Time	Dimming Level	Ordering Code
Safety	4 hours	25%	CDMGS25
Safety	4 hours	50%	CDMGS50
Safety	4 hours	75%	CDMGS75
Median	6 hours	25%	CDMGM25
Median	6 hours	50%	CDMGM50
Median	6 hours	75%	CDMGM75
Economy	8 hours	25%	CDMGE25
Economy	8 hours	50%	CDMGE50
Economy	8 hours	75%	CDMGE75
Programmable	Determined by user	Determined by user	CDMGP
To be determined	n/a	n/a	CDMGTB

# Options

Description	Function	Ordering Code
Photoelectric Cell, Twistlock type with receptacle	Used to calculate and calibrate dimming schedules.*	PH8
Photoelectric Cell, Button type	Used to calculate and calibrate dimming schedules.*	PH7
Motion Sensor	Used to detect site activity and temporarily return luminaire to full power.	Please ask your representative

\* A photocell is strongly recommended. For any other type of switching device, please contact Philips Lumec to verify its compatibility.

# Technical Data

## Storage conditions

Temperature	min -40F / -40C max 176F / 80C
Relative humidity	min 5% / max 95% RH

## Operating conditions

Ambient temperature	min -22F / -30C max 140F / 60C
Case temperature	176F / 80°C
Relative humidity	min 10% / max 90% RH (no condensation)

## Mains / 0-10v connections

Drivers per Dynadimmer	2 max.
Wire range	18 gauge
Wire strip length	8" / 203 mm
Power consumption	0.5W at 220VAC/60Hz

## Programming connector

Connector type	Micro MATE-N-LOK connector
Factory setting	After power-up, the control voltage will rise slowly to +5VDC

## Mains connection

Operational voltage	120-277V ± 10%
Frequency	50/60 Hz ± 5%
Maximum load	Not applicable

## Dim interface

Control voltage	0-10V
Max. current	0.3mA sinking
Dim curve	Defined by selected driver
Protection	Protected against accidental connection with mains voltage
Output impedance	2700 ohm

## Housing

Protection class	Tested to IP66
Dimensions (H x L x Long.)	0.98" x 2.13" x 3.15" 24.9 mm x 54.1 mm x 80 mm
Weight	0.1874 lbs / 0.085 Kg
Material	PC-GE LEXAN 223R-111
Color	Black
Glow wire test	≥ 1562F at 0.04" / 1 mm material thickness
Flammability	UL94-V2 at 0.03" / 0.7 mm material thickness UL94-V0 at 0.24" / 6.1 mm material thickness
Fixation	M8 x 16 bolt (class 8.8) or 2 x M4 screw with cylinder head

The LLC7230 is designed to be built into a luminaire, a box, an enclosure, or the like and is not intended to be mounted outside aluminaire, etc. without special precautions. The LLC7230 housing provides insulation for class 2.

## Safety

0-10V interface	The interface is double (0-10V) isolated from the mains supply (4kV routine test for transformer)
Programming interface	The interface is double (0-10V) isolated from the mains supply (4kV routine test for transformer)



### Warning

Mains has to be disconnected before connecting the programmer.

[www.lumec.com](http://www.lumec.com)

PHILIPS LUMEC HEAD OFFICE	ONTARIO OFFICE	MEXICO OFFICE
640, Curé-Boivin Boulevard	189 Bullock Drive	Zempoala #217
Boisbriand, Québec	Markham, Ontario	Col. Anenor Sales (Narvarte)
Canada J7G 2A7	Canada L3P 1W4	Mexico, D.F. 03010
T : 450.430.7040	T : 416.223.7255	T : (5255) 5564.5242
F : 450.430.1453	F : 866.971.2825	F : 450.971.2816

For the details of our different agents and representatives, please consult the **Contact us** section of our Website.

© 2010 Philips Group.

All rights reserved. We reserve the right to change details of design, materials and finishes.



/ Some luminaires use fluorescent or high intensity discharge (HID) lamps that contain small amounts of mercury. Such lamps are labeled "Contains Mercury" and/or with the symbol "Hg." Lamps that contain mercury must be disposed of in accordance with local requirements. Information regarding lamp recycling and disposal can be found at [www.lamprecycle.org](http://www.lamprecycle.org)

.....

The management at Philips Lumec has taken an official position towards sustainable development and has signed a publicly available document to ensure that all its activities tend towards that goal. / Guided by our corporate philosophies, Philips Lumec engages itself to elaborate innovative and bold initiatives that will take advantage of our teamwork so that together we all adopt a responsible behavior towards society and the environment.

The choice to use 100% recycled paper for this brochure is an example of the actions that Philips Lumec has undertaken in the scope of its dedication towards sustainable development. Using this paper reduced our ecological footprint of:



6 trees



184 kg solids waste



17 382 L water



404 kg atmospheric emissions

**PHILIPS**  
**LUMEC**