

# Different ways

### The Dynadimmer and the Chronosense

Public outdoor lighting has an important function in making outdoor activities after sunset possible in a safe and comfortable way. For a long time controlling outdoor lighting was limited to switching it on or off and saving energy was only possible by switching off selected light points. But that is now history with the introduction of Philips' stand-alone outdoor controls. A flexible solution to save energy in a safe way...

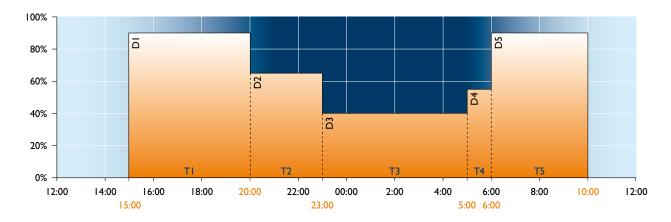




# Savings

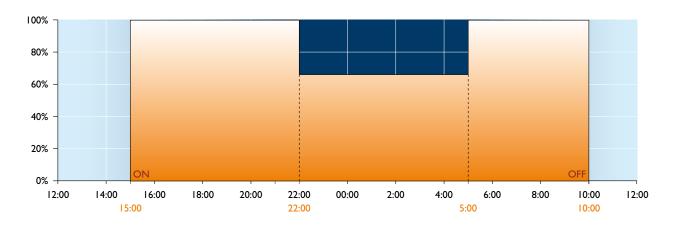
### Dynadimmer

Savings are maximized with the Dynadimmer. The fact that any level can be configured at any time makes very low levels late at night possible, high levels at peak times (though not necessarily 100%) and medium levels during the transitional periods. For example, a dimming schedule like the one shown in the picture gives an overall yearly energy saving of 40%.



#### Chronosense

The savings with Chronosense are determined by the ballast combination used. A typical configuration with a multi-wattage I 00/I 50W ballast gives an overall yearly energy saving of 20%. The ballast determines the dim level, but in combination with a multi-wattage I 00/I 50W it is usually about 65% of full power as shown in the picture.





## Dynadimmer

For I-IOV dimmable electronic drivers



The Dynadimmer is a stand-alone control unit that has a 1-10 volt dimming output and can be used in combination with a compatible dimmable electronic driver.

There are 2 versions: Dynadimmer and Dynadimmer SELV. The Dynadimmer SELV has a galvanic separation between the 1-10V output and mains. This supports SELV (Safety Extra Low Voltage) luminaires.

The Dynadimmer can be configured to dim to any level that the end-user wishes at set periods, with a maximum of five set periods. Both the levels and the time period are configured with an easy-to-use software tool, which also calculates and displays the savings obtained from a particular dimming schedule. The designed configuration is then loaded in a three-button Dynadimmer Programmer that will be used later to program the Dynadimmer. It is also possible to load the configuration directly from the computer using the USB PC programming cable. The configuration can be changed at any time by programming a new dimming schedule to adapt the lighting to a new situation or simply fine-tune the savings. The five time zones and five dim levels guarantee an optimal schedule whether the application is an industrial area, parking lot, residential area or road. The Dynadimmer helps to meet the road-lighting requirements laid down in the EN13201 lighting standards, which entail the introduction of illumination levels that take account of road use and traffic flows.



The Dynadimmer can be configured with the easy-to-use software tool.





### Chronosense

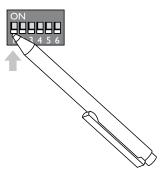
### For electro-magnetic multi-wattage ballasts

The Chronosense is a stand-alone control unit that has a 1-step dim control output and can be used in combination with one multi-wattage ballast or an additional dim ballast.

The time period for which the Chronosense applies the I-step dimming can easily be changed by means of dipswitches in the unit and can of course be changed at any time in the future. It comes ready to operate with a factory pre-set value of a 6-hour dimming period. The Chronosense is suitable for new installations as well as retrofit solutions for electro-magnetic controlled luminaires. The flexible dipswitch settings guarantee an optimal schedule whether the object is an industrial area, parking lot, residential area or road. The Chronosense helps to meet the road-lighting requirements laid down in the EN I 3201 lighting standards, which entail the introduction of illumination levels that take account of road use and traffic flows.

The dimming period can be changed by dipswitch setting.







## Different ways

Everyone enjoys walking, biking or shopping along their favorite street and everything feels better when there is light. This is the purpose of public lighting in streets and residential areas: it makes people feel safe and enhances their living experience. But many people are also concerned about the energy that outdoor lighting consumes and would like to limit outdoor lighting to "only when necessary".

Late in the evening, when people are asleep and the roads are quiet, there is no need to have all public lighting on at full power. Depending on the time and location, outdoor lighting can be dimmed, thereby reducing energy consumption by as much as 50%.

Adding a Dynadimmer or Chronosense to the light point contributes to lower energy consumption, reduced  $CO_2$  emissions, less light pollution and a more sustainable world for all. Lighting in different ways...

Philips presents two solutions for saving energy: Dynadimmer and Chronosense. Both are stand-alone devices, easy to install in the luminaire or pole without any need for external control components or additional signal wiring. They are fully flexible and can be reprogrammed at any time to fit new lighting demands if changes are needed.

Both Dynadimmer and Chronosense use the same principle to apply the dimming schedule. To calculate the hours for which it should operate, both devices count the time that the lights were turned on and determine a mid-point, which is used as an intelligent reference point.



#### For more information

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