The **AstroDIM** function provides a multi-stage night-time power reduction according to an internal timer that adapts to the system power on/off time. No external control infrastructure is required. This device automatically implements the dimming profile according to a predefined planned relationship to the midpoint, which is calculated based on the system power on/off times.

100 %   100 %

50 %
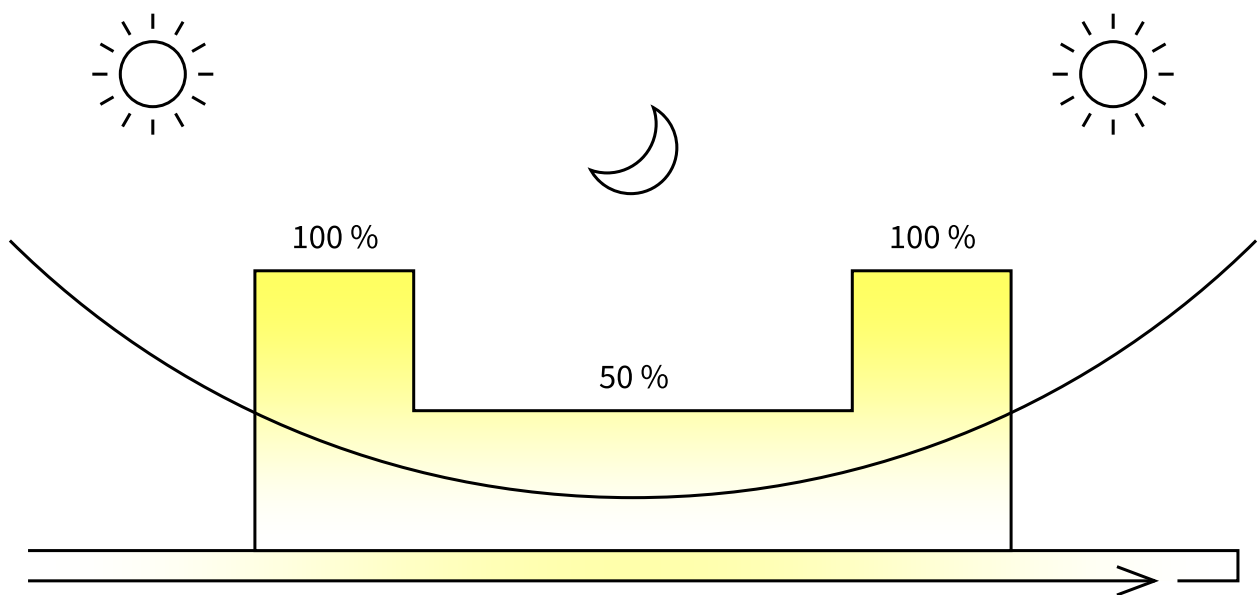
SUMMER (June 21)

Sunset
20.50 hrs. — approx. 21.00 PM, 3 hrs. to midnight

Sunrise
04.50 hrs. — approx. 05.00 AM, 5 hrs. from midnight

3 hrs. + 5 hrs. = 8 hrs. ÷ 2 = 4 hrs.

21.00 hrs. + 4 hrs. = virtual midnight
corresponds to **01.00 AM**

WINTER (December 21)

Sunset
15.50 hrs. — approx. 16.00 PM, 8 hrs. to midnight

Sunrise
07.50 hrs. — approx. 08.00 AM, 8 hrs. from midnight

8 hrs. + 8 hrs. = 16 hrs. ÷ 2 = 8 hrs.

16.00 hrs. + 4 hrs. = virtual midnight
corresponds to **00.00 AM**

The difference between virtual midnight can therefore
differ by up to one hour during the year.

SPECIFIC EXAMPLE

Setting **T1 = 1 hrs. 50 % and T2 = 4,5 hrs. 50 %**

in summer there will be a switching time of approx. 00.00 and 05.30
… in winter switching time of approx. 23.00 and 04.30

DAY

sunset   horizon   sunrise

civil   6°   civil

12°

nautical   twilight   dawn   nautical

18°

astronomical   **NIGHT**   astronomical

w w w . s u n c a l c . n e t
w w w . e l - l u m e n . c z