

TALEXcontrol LNU

# 12 V DC / 24 V DC PWM dimmer



Letter standard



Letter mini



Lightbox standard



Lightbox slim



Light contour

### Perfect visibility – twilightCONTROL

In twilightCONTROL mode, the lighting level of the signage installation automatically adjusts to ambient brightness thanks to the built-in light sensor. This ensures perfect illumination and energy savings.

In this mode of operation, the system is completely switched off during the day. In the evening, the signage switches on automatically, up to the maximum settable level. The high lighting level at dusk ensures perfect visibility, significantly enhancing the advertising effect. As it grows darker, brightness is reduced to the lowest settable level, thereby substantially improving signage legibility during the night. At daybreak, the lighting is again adjusted to its maximum level, in order to optimise visibility. As soon as there is sufficient ambient brightness the sign is switched off.

- \_\_\_ Perfect visibility even on overcast days
- \_\_\_ Potential energy savings of up to 40 %
- \_\_\_ Reduction of light pollution in accordance with national directives and laws
- \_\_\_ Switches on and off depending on ambient brightness – no clock required
- \_\_\_ Increased LED service life

### Quick and easy installation – no external light sensor – no programming

The TALEXcontrol LNU PWM dimmer with a built-in light sensor is installed in the signage installation so as to be invisible for the observer.

The dimmer is simply connected between the LED Driver and the LEDs and does not need any programming.

- \_\_\_ No installation effort required for light sensor
- \_\_\_ Easy retrofitting of existing installations

### Easy dimming via touch switch – switchDIM

In another mode of operation, the so-called switchDIM mode, the lighting level of the LEDs and/or the signage installation can be changed by means of a connected touch switch.

- \_\_\_ Lighting level of signage installation adjusted to meet national laws and directives
- \_\_\_ Simple system for dimming LEDs for general-lighting applications such as cove lighting, shelf lighting, etc.



With twilightCONTROL



Without twilightCONTROL

# TALEXcontrol LNU PWM dimmer

TALEXcontrol LNU M



## ▼ At a glance

- \_\_\_ Perfect visibility – twilightCONTROL
- \_\_\_ Energy savings of up to 40 %
- \_\_\_ Reduction of light pollution – (“Dark Sky certified friendly devices”)
- \_\_\_ Quick and easy installation – no external light sensor – no programming
- \_\_\_ Rugged design – IP67
- \_\_\_ Easy dimming via touch switch – switchDIM
- \_\_\_ Can be upgraded using LNU S extension units for installations with LED output in excess of 7,000 W
- \_\_\_ Built-in temperature monitoring function
- \_\_\_ Increased LED service life
- \_\_\_ Customised settings possible via LNU I service unit
- \_\_\_ 5 year guarantee

TALEXcontrol LNU S



TALEXcontrol LNU I

Technical features	LNU M	LNU S	LNU I
Input voltage	12 / 24 VDC		USB – 5V
Max. input current	15A		USB – 50mA
No. of output channels	3 × PWM		Not applicable
DC voltage range output	12 / 24 VDC		Not applicable
Output current	max. 5 A / channel		Not applicable
PWM frequency	495 Hz		Not applicable
Voltage drop	150 mV max.		Not applicable
Ambient temperature $t_a$	-40 ... +60 °C		0 ... +50 °C
Storage temperature	-40 ... +85 °C		-30 ... +85 °C
Housing temperature $t_c$	max. 85 °C		max. 65 °C
Dimensions L × W × H	139 × 40 × 18.5 mm		48.5 × 53 × 13 mm
Protection rating	IP67		IP20
Input voltage range switchDIM	100–277 VAC 50/60 Hz	Not applicable	Not applicable
Dimming range twilightCONTROL	0–98 %**	0–98 % */**	Not applicable
Dimming range switchDIM	0 % / 0.1–100 %	0 % / 0.1–100 %	Not applicable
Marks of conformity	CE, ENEC, cRUus, IDA	CE, ENEC, cRUus	CE
Max. no. of LNU S per LNU M	Not applicable	19	Not applicable
Service life $t_a$ +55 °C	50,000 h	50,000 h	50,000 h

\*The extension units are controlled by the master unit via the synchronisation cable.

\*\* Maximum level depends on the LEDs used and the mounting situation.

# TALEXcontrol LNU PWM dimmer

TALEXcontrol LNU PWM dimmer	Order No.	Designation
LNU M 12–24 V IP67 G1	28000018	Master unit
LNU S 12–24 V IP67 G1	28000050	Extension unit
LNU I IP20 G1	28000163	Service unit for programming LNU M and LNU S

## Energy savings

Sample calculation:

We assume a signage installation with an output of 150W, which is operated 10 hours a day. This calculation is based on an electricity price of EUR 0.10/kWh.

One signage installation is operated without dimming, the other is dimmed to 50W for eight hours each day.

Signage installation with  
TALEXchain CRYSTAL, undimmed,  
without control

Constant output of 150W,  
10 hours/day, 365 days/year

$10 \times 0.15 \text{ kW} \times 365$   
= 547 kWh/year

Energy costs:  
 $547 \times \text{EUR } 0.10 = \text{EUR } 54.70$

Signage installation with  
TALEXchain CRYSTAL, controlled by  
TALEXcontrol LNU

Operated daily for 2 hours at 150W,  
dimmed to 50W for 8 hours

$(2 \times 0.15 \text{ kW} + 8 \times 0.05 \text{ kW}) \times 365$   
= 255 kWh/year

Energy costs:  
 $255 \times \text{EUR } 0.10 = \text{EUR } 25.50$

In this sample calculation, the annual savings amount  
to 292 kWh, EUR 29.20

This product is certified and registered as an "IDA friendly device".  
IDA is the recognized authority on light pollution. Founded in 1988, IDA is the first  
organization to call attention to the hazards of light pollution, and in 26 years of operation  
its accomplishments have been tremendous. Tridonic is proud to support IDA.



## Support and advice from a single source

We will help you to create messages out of light  
that are unbeatable in terms of economy and functionality.



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### Light you want to follow.

