



## PREAMBLE

This Technical User Guide contains warnings and guidance for correct and safe operation of the product. These instructions must be followed at all times. TPL Vision will not be held responsible for problems caused by using the product contrary to these instructions and the Warranty will be deemed invalid.



## UNPACKING

Products are packed in our factory, using suitable materials for a safe transport through the usual means of transportation, in France and internationally. However, a damaged package must be reported to the carrier on delivery. Hand-written reservations must be indicated on the delivery order. Moreover, please send a letter or an email to TPL Vision as soon as possible (up to 24 hours after the delivery). If the transportation damage has not been stipulated on the delivery order and reported to TPL Vision in time, the package will not be taken back nor exchanged. To open the package, do not use any cutting blade to avoid damaging the product(s). Please use the delivered accessories, if needed (do not use any other products or equivalents to replace the delivered accessories).

## RISK CLASS

The EN-62471 norm about lighting fluxes enables the classification of led lightings in 4 distinct groups, according to their hazardousness degree. Please find below an indicative table, recapitulating the classes of risk for our standard products.

Colour	Class	Risk
White WHI, Green 525 nm, Red 630 nm	0	none
UV 405 nm, Blue 470 nm, IR 850 nm	1	low
UV 365 nm	2	moderate
UV 385 nm	3	high

In all cases, TPL Vision recommends the use of **the protection glasses** that are listed in its catalog.

For more information about photo-biological risks, do not hesitate to contact us.

TPL Vision can provide calculation notes about **the nominal distance of eye risks** (security distance).



**BEWARE to the infrared light**, invisible to the eyes.

To know if the light is on, please refer to the LED indicators.



# LITE LBAR+ USER GUIDE

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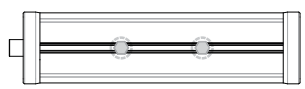
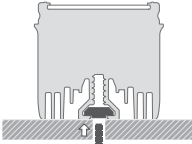
## DIMENSIONS

	Length* (mm)	Height (mm)	Width (mm)
	A	B	C
LBAR+ 250	283	45	47,6
LBAR+ 500	533	45	47,6
LBAR+ 750	783	45	47,6
LBAR+ 1000	1034	45	47,6
LBAR+ 1250	1285	45	47,6
LBAR+ 1500	1535	45	47,6
LBAR+ 1750	1785	45	47,6

\* Total length, without connector.



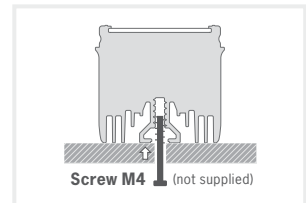
## FIXING



- Length (Lg) < 500 mm: **2** captive nuts M4
- 500 mm ≤ Lg < 1000 mm: **4** captive nuts M4
- 1000 mm ≤ Lg < 1500 mm: **6** captive nuts M4
- 1500 mm ≤ Lg ≤ 1750 mm: **8** captive nuts M4

**Captive nuts** (supplied)


Please use all the captive nuts. **NEVER REMOVE THEM FROM THE BAR.**



During the set up, the light has to be switched off and unplugged. Please use M4 screws and insert them in the captive nuts located in the back of the light. The light will be better fixed if you spread the attachment points symmetrically along the bar.

You can also use M4 screws (not supplied) fastened directly into Aluminium profile with a tightening torque from 0.5 to 1.5 Nm. We also recommend the use of a thread-locker (not supplied) to avoid any risk of loosening.

## LED INDICATORS

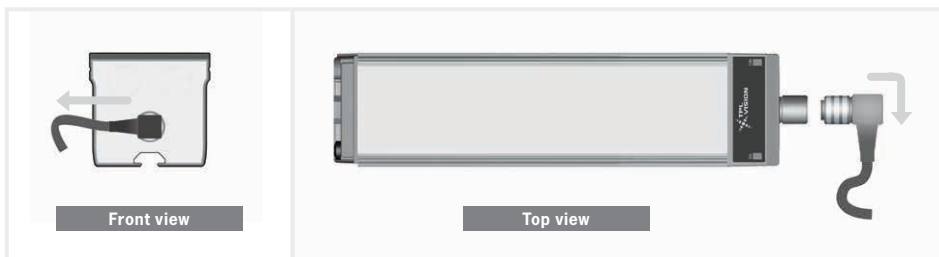


- ON : **Power** LED indicator
- Str. : **Strobe** LED indicator



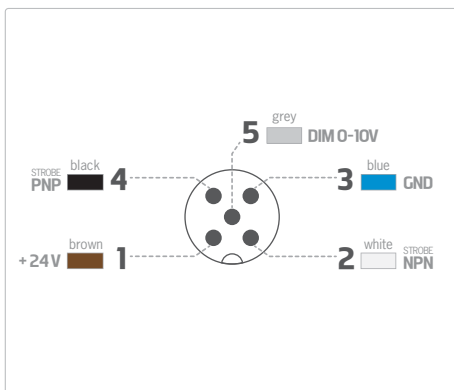
## ■ WIRING

If you use an angled connector, please note that the angle will be the same as shown below.

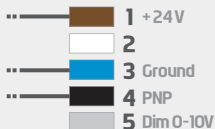


## ■ CONNECTION

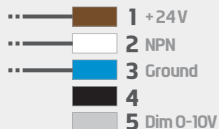
### M12 Connector 5 male points



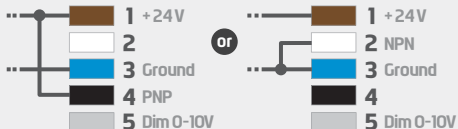
#### STROBE PNP :



#### STROBE NPN :



#### CONTINUOUS MODE :



### VOLTAGE DROP

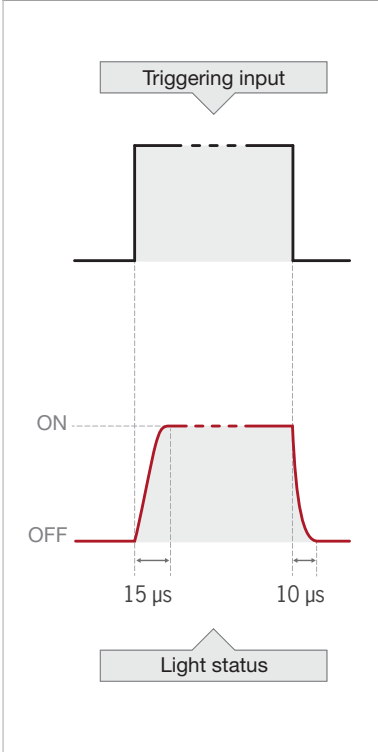
Dimensions	250	500	750	1000	1250	1500	1750
Max voltage drop in the bar (V)	0,02	0,08	0,18	0,31	0,49	0,70	0,96
Power supply cable : max length 5x0,34 <sup>2</sup> for acceptable voltage drop (m)	>150	>150	>150	116	89	69	55

The **M12 male connector 5 points** is **COMPLIANT** with the M12 female connector 4 points. In that case, the dimming option is not available.

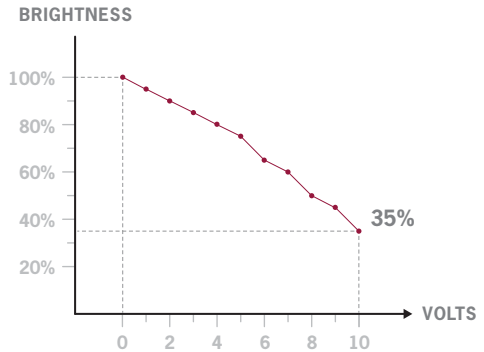


## CONTROL

### STROBE MODE



### DIMMING CONTROL



Voltage (VDC)	0	1	2	3	4	5	6	7	8	9	10
Brightness	100%	95%	90%	85%	80%	75%	65%	60%	50%	45%	35%

#### Potential dimming between 0 & 10 V.

If the DIMMING pin is not connected, or with 0V applied to it, the product is at 100% of its lighting power. With 10V applied, it is reduced to 35% of lighting power.

### STROBE PNP & NPN

**PNP** : from 5 to 24V for 100% ON. From 0 to 1V for 100% OFF.

**NPN** : less than 1V for 100% ON. Above 2V for 100% OFF. Max 20V.

For a longer lifespan, the light can work in strobe mode.

The product is optimised for a lifespan >50kh in a 40°C atmosphere. Not for outdoor use.

In strobe mode, the strobing time is directly equivalent to the time during which the strobe entry is activated.



## ■ TECHNICAL INFORMATION

	250	500	750	1000	1250	1500	1750
Max. consumption (W)	14.4	28.8	43.2	57.6	72	86.4	100.8
Min. functioning Voltage	20V in the light input						
Normal functioning Voltage	24V in the light input (±10%)						
Max. functioning Voltage	30V in the light input						
Max. consumption Strobe signal	5mA						
Operating temperature	-10° to +40°C / 80% of humidity without condensation. No thermal shock (max temperature variation: 10°C in 24h)						

## ■ COMPARISON PREVIOUS VERSIONS

	DIMENSIONS	POWER
Lite LBAR+ 250	LBAR 4 – 30 mm	Power LBAR4 <b>+20%</b>
Lite LBAR+ 500	LBAR 8 – 60 mm	Power LBAR8 <b>+20%</b>
Lite LBAR+ 750	LBAR 12 – 90 mm	Power LBAR12 <b>+20%</b>
Lite LBAR+ 1000	LBAR 16 – 120 mm	Power LBAR16 <b>+20%</b>
Lite LBAR+ 1250	LBAR 20 – 150 mm	Power LBAR20 <b>+20%</b>
Lite LBAR+ 1500	LBAR 24 – 180 mm	Power LBAR24 <b>+20%</b>
Lite LBAR+ 1750	LBAR 28 – 210 mm	Power LBAR28 <b>+20%</b>

## ■ LIGHTING POWER

	EQUIVALENCE
Lite LBAR+ 250	Essential EBAR+ 250 <b>x 0.75</b>
Lite LBAR+ 500	Essential EBAR+ 500 <b>x 0.75</b>
Lite LBAR+ 750	Essential EBAR+ 750 <b>x 0.75</b>
Lite LBAR+ 1000	Essential EBAR+ 1000 <b>x 0.75</b>
Lite LBAR+ 1250	Essential EBAR+ 1250 <b>x 0.75</b>
Lite LBAR+ 1500	Essential EBAR+ 1500 <b>x 0.75</b>
Lite LBAR+ 1750	Essential EBAR+ 1750 <b>x 0.75</b>

The dimensions of useful surfaces keep on being the same.



## ■ USER SECURITY

**Do respect the power supply voltages and the connection terminals.  
Do not modify or dismantle all or part of the product.  
Do not connect or clean when power is on.  
Do not watch the lighting source directly, and follow the advice below :**



- If the workstation enables it, interpose a filter that will stop the lighting radiation under fixed or adjustable frame between the source and the operator.
- When these measures cannot be implemented, supply the operators with glasses (class 4) available for sale at TPL Vision, or with a dedicated protective mask, that will stop the lighting radiation.
- Forbid or limit the direct access to the lighting source (exposure into the radiation axis).
- Establish a security perimeter so as to prevent the operators from approaching the lighting source beyond the recommendations of the manufacturer, as for eye irritation is concerned.
- In any case, ensure that the chosen means properly reduce the exposition quantities (features of screens or glasses to be chosen, according to the wavelengths that the operators are exposed to).

## ■ EQUIPMENT MAINTENANCE

### **CLEANING (when the product is switched off)**

Please use a soft and dry cloth. Do not use any abrasive material.  
Do not use any cleaning solvent or aggressive chemical product.  
TPL Vision recommends to use isopropyl alcohol.





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**TPL VISION**  
IS AN **ISO 9001**  
CERTIFIED MANUFACTURER

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