



HIGH POWER STROBE HPS BAR USER GUIDE

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
Red 630 nm, Green 525 nm	0	none
White WHI, Blue 470 nm, IR 850 nm	1	low

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.



HIGH POWER STROBE HPS BAR USER GUIDE

P2/8

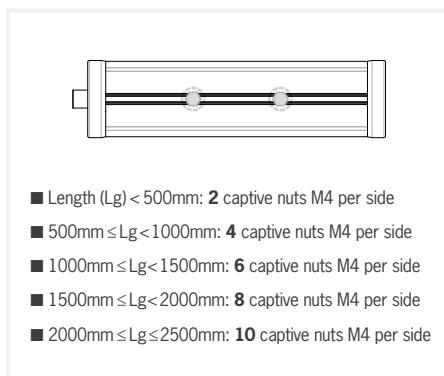
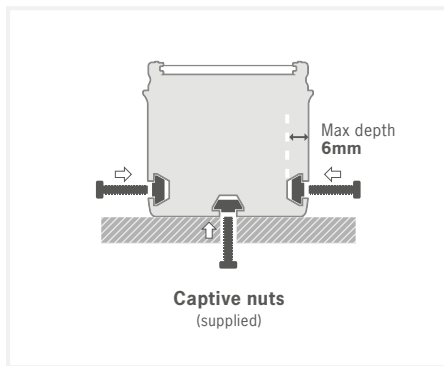
DIMENSIONS



	Length (mm)	Height (mm)	Width (mm)
	A	B	C
HPS BAR 125	158	45	47.6
HPS BAR 250	283	45	47.6
HPS BAR 375	408	45	47.6
HPS BAR 500	533	45	47.6
HPS BAR 625	658	45	47.6
HPS BAR 750	783	45	47.6
HPS BAR 875	909	45	47.6
HPS BAR 1000	1034	45	47.6
HPS BAR 1125	1160	45	47.6
HPS BAR 1250	1285	45	47.6
HPS BAR 1375	1411	45	47.6
HPS BAR 1500	1536	45	47.6
HPS BAR 1625	1661	45	47.6
HPS BAR 1750	1786	45	47.6
HPS BAR 1875	1911	45	47.6
HPS BAR 2000	2038	45	47.6
HPS BAR 2125	2163	45	47.6
HPS BAR 2250	2298	45	47.6
HPS BAR 2375	2422	45	47.6
HPS BAR 2500	2547	45	47.6

* Total length, without connector.

FIXING

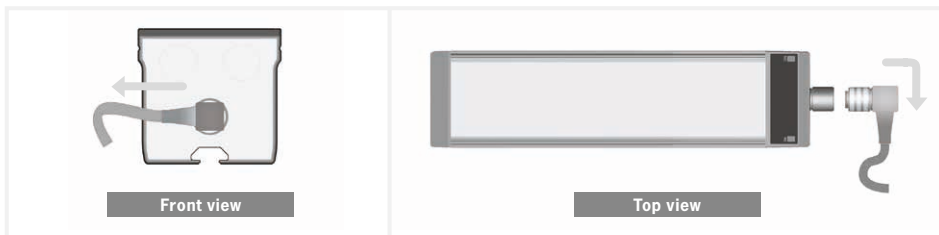


Please use the captive nuts for mounting.
NEVER REMOVE THEM FROM THE BAR.

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.

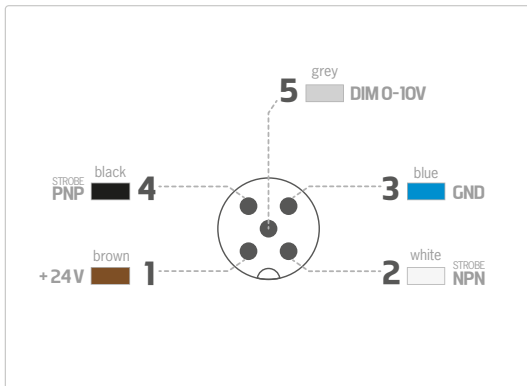


■ WIRING

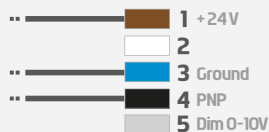


■ CONNECTION (size: 125mm → 1000mm)

M12 Connector 5 male points



STROBE PNP :



STROBE NPN :



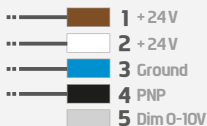
PNP : from 5 to 24V for 100% ON. From 0 to 1V for 100% OFF.

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

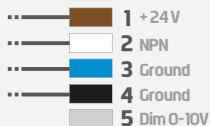
EMC IMMUNITY CONNECTIONS: for greater EMC immunity when using the light under Strobe operation, configure the signal connections as illustrated here. For Dimming, the Pin (5) should be connected to a voltage between 0V and 10V to ensure light output is correctly configured.



STROBE PNP :



STROBE NPN :





HIGH POWER STROBE HPS BAR USER GUIDE

P4/8

VOLTAGE DROP (size: 125mm → 1000mm)

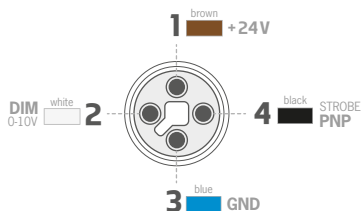
Dimensions	125	250	375	500	625	750	875	1000
Max voltage drop in the bar (V)	0.01	0.03	0.06	0.11	0.17	0.25	0.34	0.44
Power supply cable : 5x0,34 ² max length for acceptable voltage drop (m)*	180	90	60	43	34	27	23	20

* For longer power supply cable, increase the section of the copper wire.

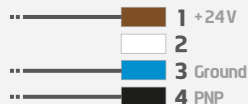
■ CONNECTION (size: 1125mm → 2500mm)

M12 Connector 4 male points

POWER CONNECTOR - T CODING



STROBE PNP :



PNP : from 3 to 24V for 100% ON. From 0 to 1V for 100% OFF.

NPN : NPN version is available on request as a custom product.

VOLTAGE DROP (size: 1125mm → 2500mm)

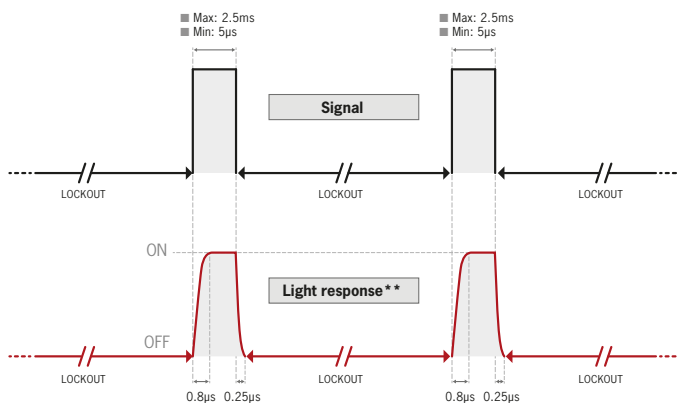
Dimensions	1125	1250	1375	1500	1625	1750	1875	2000	2125	2250	2375	2500
Max voltage drop in the bar (V)	0.56	0.69	0.7	0.72	0.75	0.8	0.86	0.94	1.03	1.13	1.25	1.38
Power supply cable : 5x0,34 ² max length for acceptable voltage drop (m)*	17	15	15	13	12	11	11	10	9	9	8	8

* For longer power supply cable, increase the section of the copper wire.



■ CONTROL

STROBE MODE



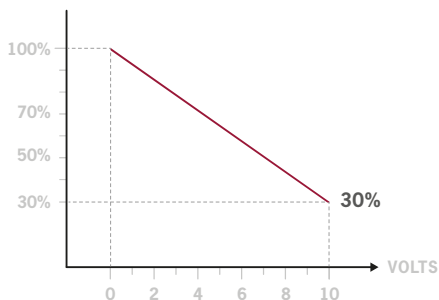
■ **Duty cycle: 3.5%***

■ **Max Ton: 2.5 ms**

*Product is protected from triggers during the lockout period.

** Product uses capacitor banks to keep consumption low. Please allow the product 3 seconds to charge after connecting to 24V Supply.

DIMMING 0-10V



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 30% of lighting power.

The product is optimised for a lifespan >50kh in a 40°C atmosphere.

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



HIGH POWER STROBE HPS BAR USER GUIDE

P6/8

POWER SUPPLY

	125	250	375	500	625	750	875	1000	1125	1250	1375	1500	1625	1750	1875	2000	2125	2250	2375	2500
Average consumption (W)	8.4	16.8	25.2	33.6	42	50.4	58.8	67.2	75.6	84	92.4	100.8	109.2	117.6	126	134.4	142.8	151.2	159.6	168
Max. consumption White (W)	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
Normal functioning voltage	24V in the light input ($\pm 5\%$)																			
Max. consumption Strobe & Dimming signal																				

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.
- 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.

■ OPERATING CONDITIONS

0° to +40°C / 80% of humidity without condensation.
No thermal shock (max temperature variation: 10°C in 24h).
Not for outdoor use.



Brenchley House, School Road
Charing, Kent TN27 0JW
United Kingdom

+44 (0)1738 310 392

contact@tpl-vision.co.uk

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

www.tpl-vision.com