TPL VISION
Active LED solutions



COLOUR TEST BAR
TECHNICAL 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

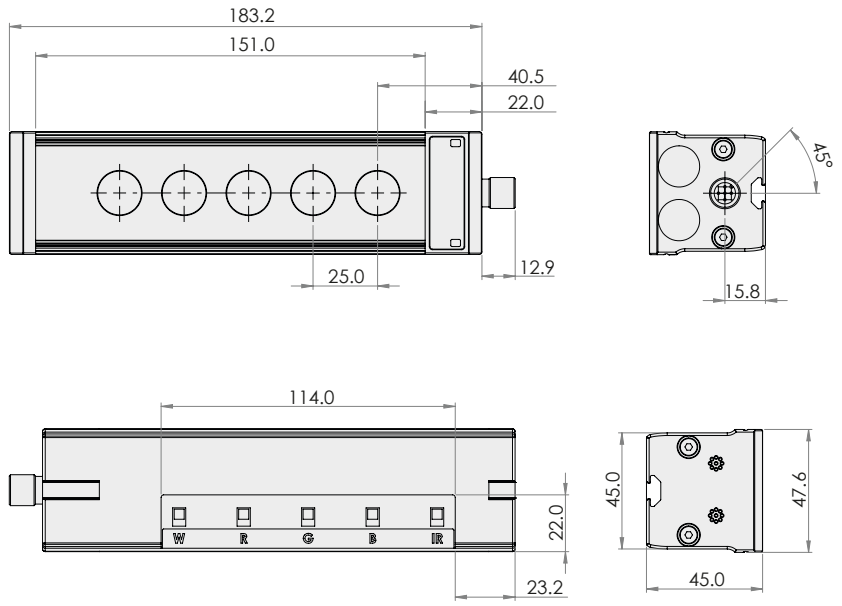
The EN-62471 norm about lighting fluxes enables the classification of led lightings in 4 distinct groups, according to their hazardousness degree. Please find below an indicative table, recapitulating the classes of risk for our standard products.

Colour	Class	Risk
Red 630 nm, Green 525 nm	0	none
White WHI, Blue 470 nm, IR 850 nm UV 365 –› 405 nm SWIR 1060 –› 1550 nm	1	low

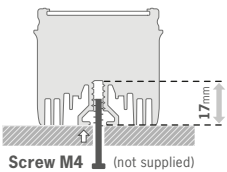
TPL Vision recommends the use of **the protection glasses** that are listed in its catalog.

BEWARE to the infrared light, invisible to the eyes.
To know if the light is on, please refer to the LED indicators.

DIMENSIONS



FIXING



During the set up, the light has to be switched off and unplugged.

Use M4 screws (not supplied) fastened directly into Aluminium profile with a tightening torque from 0.5 to 1.5 nm. The light will be better fixed if you spread the attachment points symmetrically along the bar.

We also recommend the use of a threadlocker (not supplied) to avoid any risk of loosening.

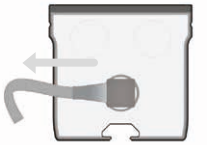
LED INDICATORS



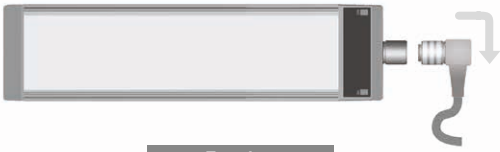
ON : **Power** LED indicator
(product is powered)

Str. : **Strobe** LED indicator
(LEDs ar ON)

WIRING



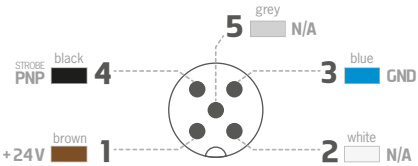
Front view



Top view

CONNECTION

M12 Connector 5 male points



STROBE **PNP** :

1 +24V
2 N/A
3 Ground
4 PNP
5 N/A

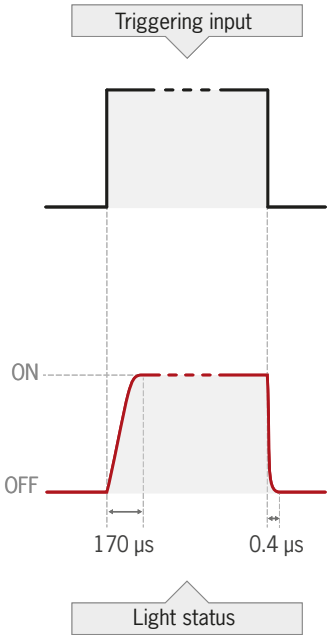
CONTINUOUS MODE :

1 +24V
2 N/A
3 Ground
4 PNP
5 N/A

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

CONTROL

STROBE MODE



LED CONFIGURATION

The bar holds 5 LED channels. Each channel is switched ON or OFF individually with the selector switches on the back of the bar, so one or several wavelengths can be lit at the same time.

The strobe input then drives the channels selected by the switches.

LED ORDER (from connector):

TEST-BAR-RGBWIR
WHI - 630 nm - 525 nm - 470 nm - 850 nm

TEST-BAR-UVWHI
WHI - 365 nm - 385 nm - 395 nm - 405 nm

TEST-BAR-SWIR
1060 nm - 1200 nm - 1300 nm - 1460 nm - 1550 nm



Example of selector switches (back of the bar)

The **M12 male connector 5 points** is **COMPLIANT** with the M12 female connector 4 points.

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.

POWER SUPPLY

Max. consumption (all versions)	4 W
Normal functioning Voltage	24 V in the light input (±10%)

OPERATING CONDITIONS

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

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.

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Features and presentations liable to changes without notice.

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Active LED solutions

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TPL VISION
IS AN **ISO9001**
CERTIFIED MANUFACTURER

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