

Internal -s Controller

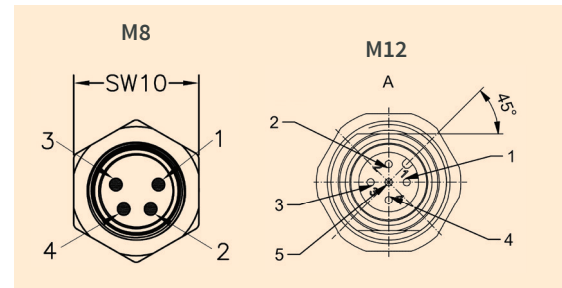
Versatile internal -s controller for MBJ standard lighting with four operating modes and high efficiency for low heat generation.



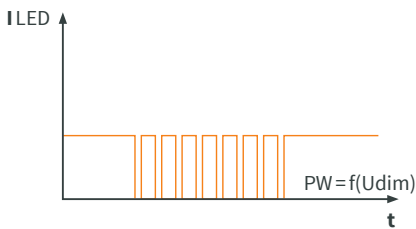
Electrical connection and operation modes

MBJ lights are delivered with M8x1 4-pin, M12x1 5-pin or open cable ends depending on the version.

Pin	Color ¹⁾	Steady light	steady light with brightness control	Triggered flash	Triggered light
1	brown	24VDC	24VDC	24VDC	24VDC
2	white	24VDC	1...10V	0V or Ground	24VDC
3	blue	24VDC	0V or Ground	Trigger	Trigger
4	black	Ground	Ground	Ground	Ground
5	green-yellow	not used			

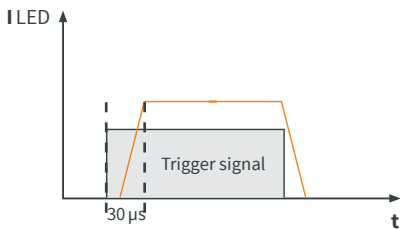


1) Wire color of MBJ lighting cable



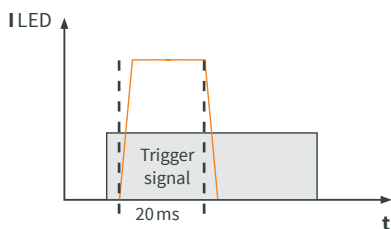
Steady light with brightness control

The brightness can be adjusted via an analog control input between 1V and 10V with a maximum resolution of 200 steps. Due to the PWM control with 3.8 kHz we recommend an exposure time of the camera of at least 5ms. Pin2 (DIM) is a high resistance current sink with an input current of 0.2 mA at a 5V signal level and 1mA at a 24V signal level.



Trigger

The trigger input is high active. From a signal level of approx. 5V, the lighting is switched on. Up to a signal level of 1V the lighting is switched off. The latency of the trigger signal is max. 30µs. Pin3 (Trigger) is a high resistance current sink with an input current of 0.2 mA at a 5V signal level and 5 mA at a 24V signal level.



Triggered flash

The lighting generates a flash that is up to 2x as bright as steady light. The flash is synchronous to the trigger signal with a maximum possible time of 20 ms. If the trigger signal remains active for longer than 20 ms, the light switches off automatically after 20 ms. Clock frequencies up to 1 kHz are possible. As maximum duty cycle we recommend 25 %, as minimum flash time 100 µs.

Application Samples

