



CAMERA & LIGHT TRIGGER CABLE

Datasheet

09/2018

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FOCUSED ON **DETAIL**

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DOCUMENT INFORMATION

Revision No.	Author	Revision date	Description
0	Bartoš R.	29 June 2017	Document creation
1	Jandásek V.	30 June 2017	Photographs added, layout correction
2	Dohnal J.	03 July 2018	Editing graphics

Appendixes

Notes

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1 KEY FEATURES

- Very simple light trigger using digital camera output
- Simplification of wiring, no need for another switching element – for example DIO cards
- Designed for Basler ace GigE cameras
- Standard industrial M8 connector for light and power supply
- The length of each cable from the junction box is 1.5 m. The total length of the Y cable is 3 m.

2 PRODUCT DESCRIPTION

The cable is used to connect the illuminator's trigger input to the programmable output of the camera and at the same time to power the light and camera from one sensor connector. Identical power supply voltage of the camera and lighting is a condition for use. Before connecting, it is always necessary to read the documentation of the camera and the illuminator to see if this cable can be used. This product should primarily be used with Basler ace GigE series cameras. The most common supply voltage for the illuminators is 24 V, so it is necessary to choose cameras that support it.



Caution:

Basler ace cameras that support only 12 V power cannot be connected via the cable to the 24 V along with illumination! There is a risk of damage to the camera.

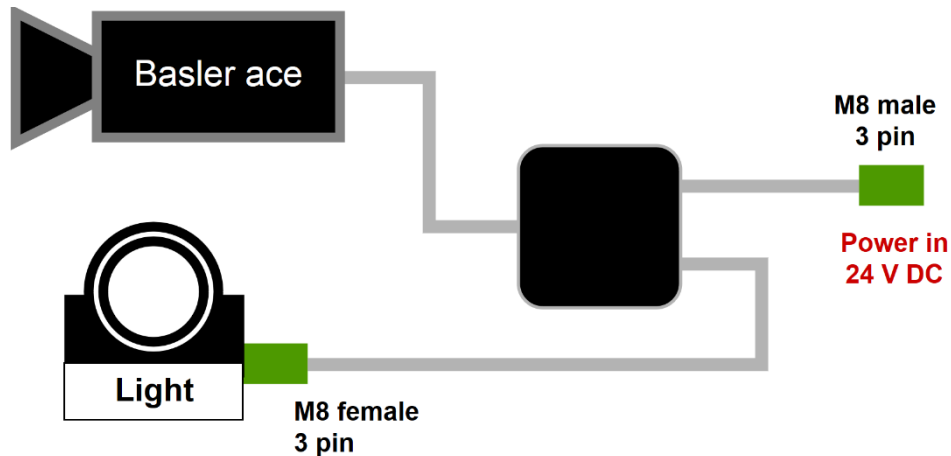


Fig. 1 – Connection block diagram

3 CONNECTORS M8

Pin	Wire colour	Meaning
1	brown	+24 VDC camera supply
3	blue	GND – common to power supply and trigger
4	black	Trigger, galvanically isolated output for the camera

Tab. 1 – Signals of the M8 sensor connector

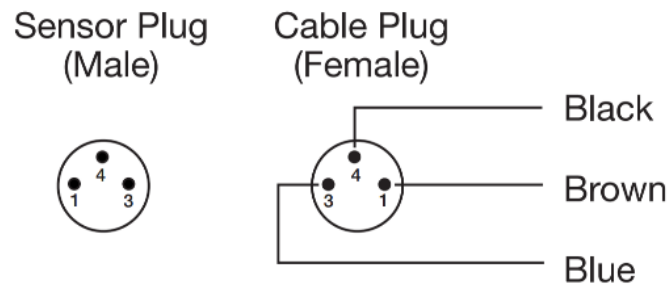


Fig. 2 – Signal distribution of M8 sensor connector, left male, right female



Fig. 3 – Cable connectors: from left Hirose connector for camera connection, M8 female for illuminator and M8 male for power supply



Fig. 4 – Example of cabling with camera and illuminator

4 SOFTWARE CONFIGURATION

To switch the illuminator on, the optically isolated camera output must be software-controlled. This output is configurable through the following parameters:

Parameter	Value	Note
CameraAttributes:: DigitalIOControl::LineSelector	Line 2	Selecting output pin of the camera
CameraAttributes:: DigitalIOControl::LineSource	Exposure Active	Source of the output signal – "true" during exposure
	User Output 1	Source of the output signal – a value defined by the user
CameraAttributes:: DigitalIOControl::UserOutputValue	„true“ / „false“	User-defined value of the output signal

Tab. 2 – Software configuration of camera output

The table above serves as an example, depending on the camera model. For details, see the camera manual.

5 ORDERING INFORMATION

Order number	Name
69980000	Camera & light trigger cable

Tab. 3 – Ordering information