



Connecting  
Smart Vision Lights  
to  
Dalsa BOA Series



## Overview

Smart Vision Lights can connect directly to BOA series camera or with BOA IO Module. Section A describes connection of lights to BOA M12 Light connection. Section B describes connection of lights to BOA series using the I/O cables.

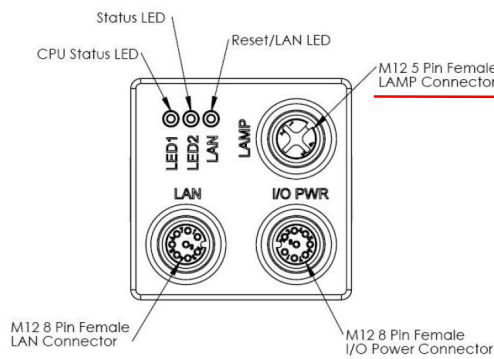
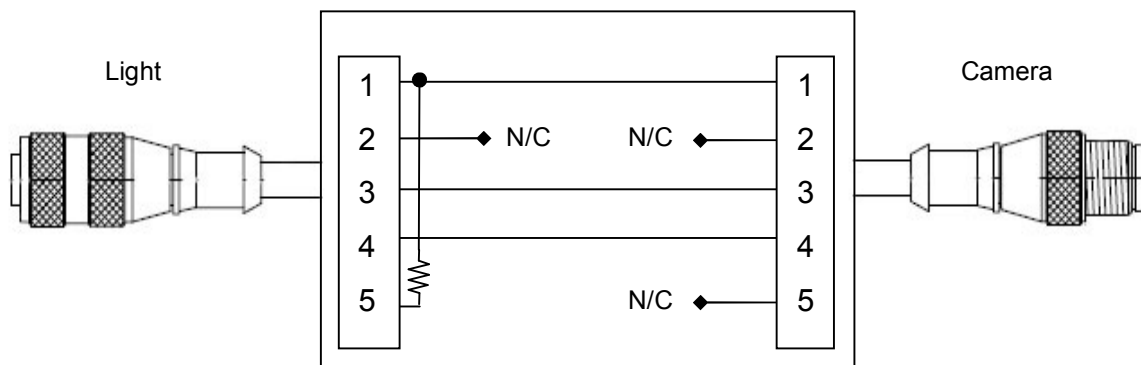
## Section A – Direct Camera Connection to Light using M12 connection on BOA series

The Light cable is used to connect the BOA vision system to an external lighting device, providing power and strobe control.

### CAUTION:

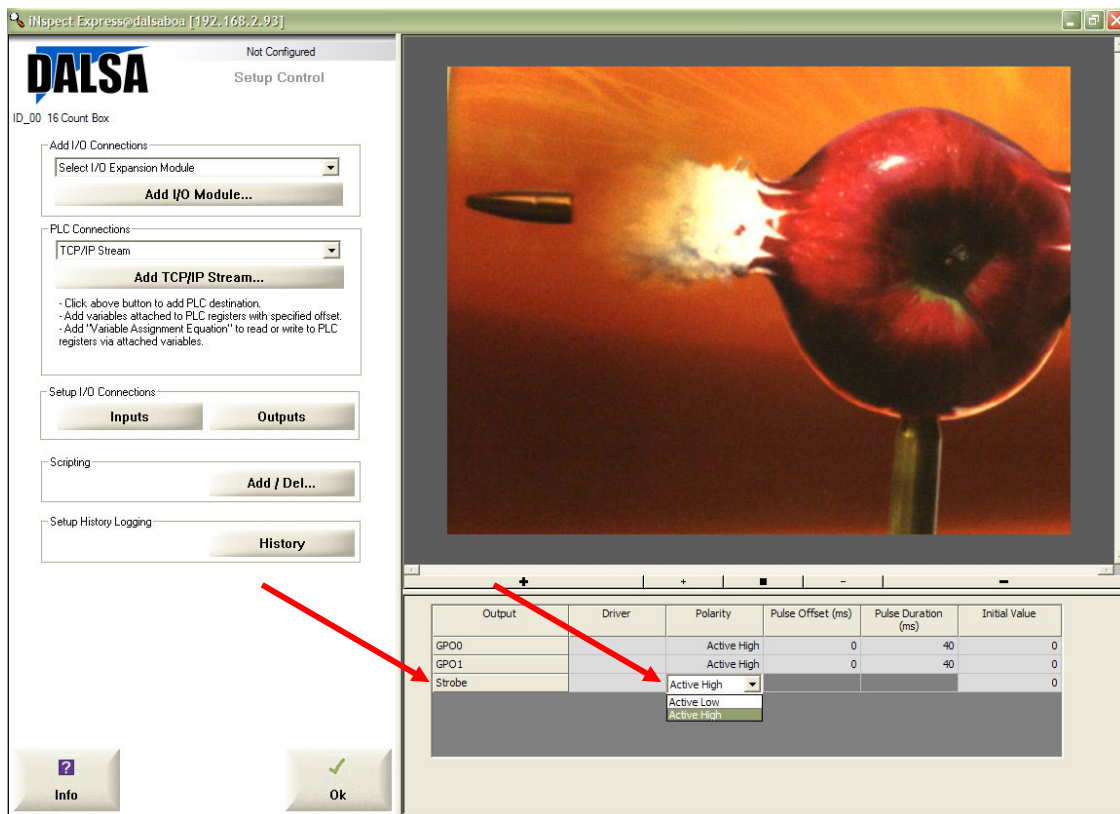
- BOA camera external lighting output is limited to 1 amp of current.
- Smart Vision Lights 5PM12-J2000-CTL must be used.
- List of lights for direct connection is available in Table 1.

### Cable Diagram for 5PM12-J2000-CTL



### Cables

Smart Vision Lights Cables Part Number	Length
5PM12-J300-CTL	0.3 meter
5PM12-J2000-CTL	2 meter



## BOA SOFTWARE CONFIGURATION

- Under Outputs Settings....
- Set Strobe To Active HIGH

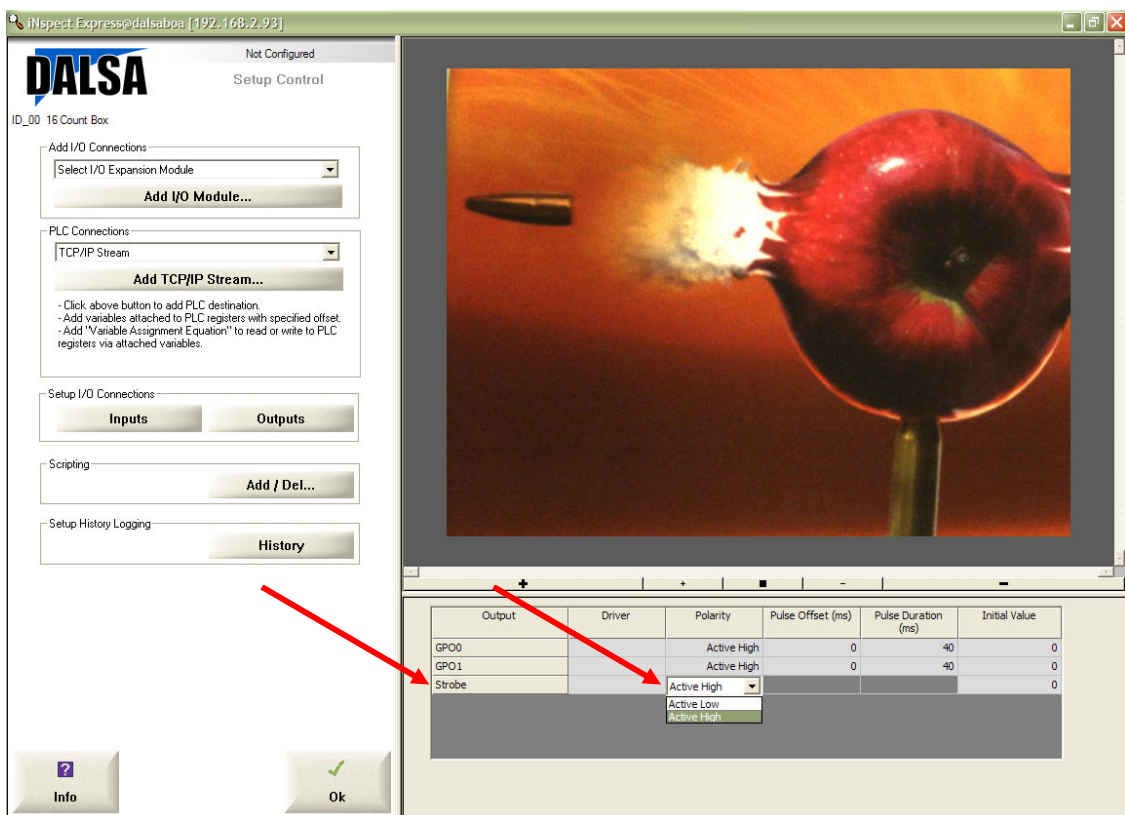
**Table 1: Lights for BOA direct connection to M12 connector**

Compatible Smart Vision Lights for IS7000	
Ring Lights	R80 & 130 Series
Spot Lights	S30 & SA30 Series
Spot Lights	S75 & SC75 Series
Linear Lights	L300 Series
Projector Lights	SP30 Series

Note: Lights for direct connection must not draw more than 1 amp. Contact Smart Vision Lights for additional lights that can be used with BOA Series.

## Section B – Connection Camera to Light using 5 pin M12 Cable

The light cable is used connecting the BOA to an external lighting device. Light can be powered directly or independently but strobed by the BOA light (Lamp) cable.



### BOA SOFTWARE CONFIGURATION

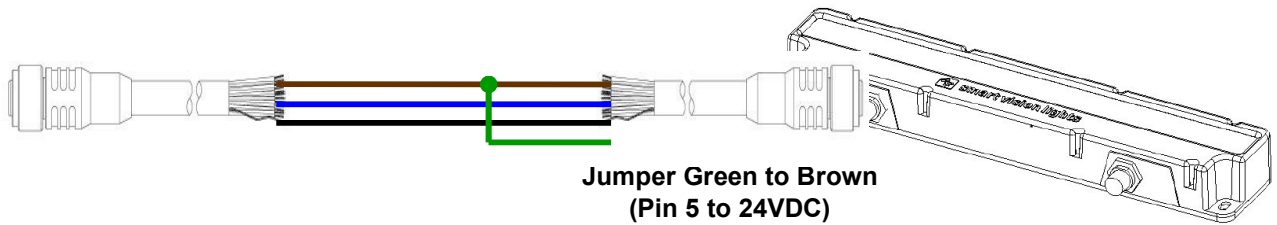
- Under Outputs Settings....
- Set Strobe To Active HIGH

## Camera Cable to Light Connection

Dalsa Light Cable	Wire Color	Connection	Wire Color	Smart Vision Light
Power	Brown	↔	Brown	Power
GND	Blue	↔	Blue	Ground
Strobe	Black	↔	Black	Strobe
Jumper Brown to Green (Grey on some 5 pin M12cables) on Light			Brown	Green

Dalsa Light Cable or  
Standard Male 5 pin M12

Smart Vision Light Cable or  
Standard Female 5 pin M12



An additional Separate Power Supply can be used if more current is needed.

Additional Power Supply Wiring	
SVL Cable	Wire Color
24VDC on Power Supply	Brown
24VDC on Power Supply	Green
Ground on Power Supply	Blue