

External Triggering

The ProLine and MicroLine imaging systems use a 6 pin connector that are labeled “AUX I/O”. The camera shutter can be triggered by shorting pin 5 to pin 6.

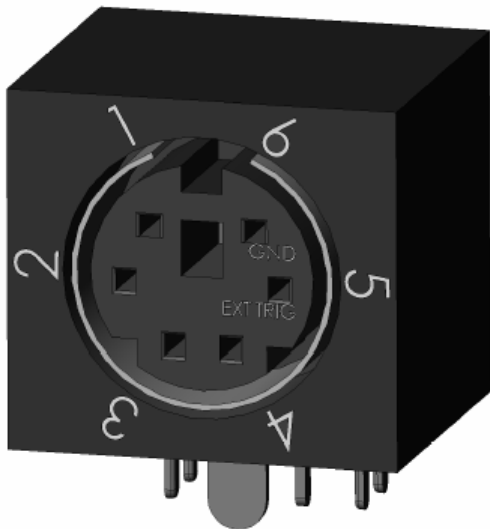
In FLIGrab:

- Run FLIGrab
- Select the Shutter Control
- Select the desired triggering on the pull down menu:
 - Select 'External trigger on LOW' for low edge triggering
 - Select 'External trigger on HIGH' for high edge triggering
- Select 'Done'
- Open the Grab Menu
- Select desired frame and exposure settings
- Click the Grab button
- Short pin 3 to pin 2
- The shutter will trigger

Notes:

- Pin 1 – Pin 6 are labeled below.
- Pin 6 is the electrical ground. Pin 5 is the logic input. (This input has a 22.1K pullup resistor to +3.3V).
- Trigger can be set to either rising edge or falling edge. To select the desired edge:
 - Select 'External trigger on HIGH' in the shutter control menu and apply a 0 to +3.3V signal to pin 5.
 - Select 'External trigger on LOW' in the shutter control menu and apply a +3.3V to 0V signal to pin 5.

External Trigger for pre-wired systems



1. The Black wire is ground and the yellow wire is the external trigger signal.
2. The external trigger signal (yellow wire) is rated for 0 to 3.3V and it is LVTTTL compatible. The edge can be selected in software.
3. The external trigger signal (yellow wire) has a 22.1K pull-up resistor to 3.3V in the camera. This allows the user to simply connect the collector (drain) of a transistor to the yellow wire and the emitter (source) to the black wire if desired. A relay across the two wires will also work.

Shutter Open Indicator

Pin 1 on the AUX I/O connector provides a LVTTTL compatible signal for shutter open indication. When the shutter is opened, pin 1 is pulled to +3.3V through an internal 22.1Kohm resistor. When the shutter is closed, pin 1 is pulled down to ground through a 332-ohm resistor within the camera. Pin 6 is the ground reference for this signal.