

Applies To

- IQeye All

Summary

This document defines the electrical characteristics of the IQeye camera relay output and trigger input.

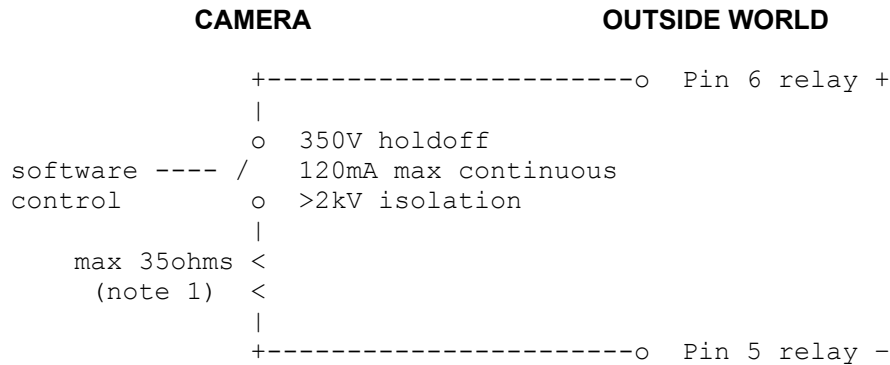
This will aid you in determining what is required to create a trigger input event as well as what type/size of load can be connected to the relay output.

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Relay Out

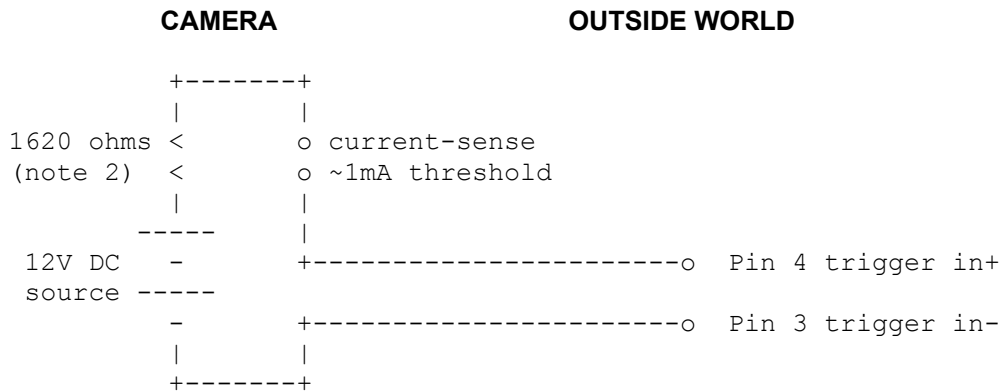
The relay output is an "optoMOS relay", wired to be bi-directional. It is fully isolated, so the +/- indicated on the connector are technically inaccurate. The equivalent circuit, assuming relatively ideal components is:



Note1: there is not actually a resistor in the path, but the switch has a maximum internal resistance of 35 ohms.

Trigger in

The trigger input is a transistor circuit set up to sense current between the pins. The +/- really DO matter, and there is no isolation circuitry. The equivalent circuit is:

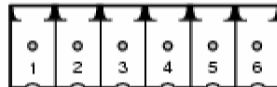


Note2: In this case, there really are resistors in the path, to limit the current (to at most 8mA), and to give us something to sense the current across.

The user can connect anything from a wire (basically zero ohms) to a maximum of 5k ohms of resistance between the two terminals to complete the path and trigger our current-sense. (And in this ideal world, an ideal switch is really just a wire that's sometimes there, sometimes not there, so that would work fine too.)

Relay I/O Connector

- 1 – Relay power output
- 2 – Ground
- 3 – Trigger in (-)
- 4 – Trigger in (+)
- 5 – Relay out (-)
- 6 – Relay out (+)



Relay I/O connector on rear of IQeye camera

More information

IQEYE Reference Manual, *Connector Specifications*