

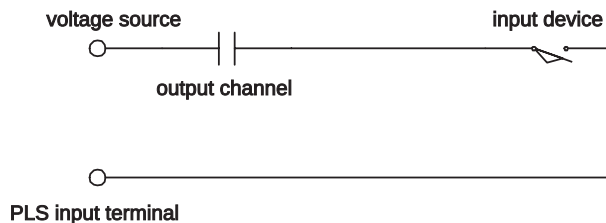
Technical Information

Using Output Channel to Turn Off Enable Input When Machine is Stopped

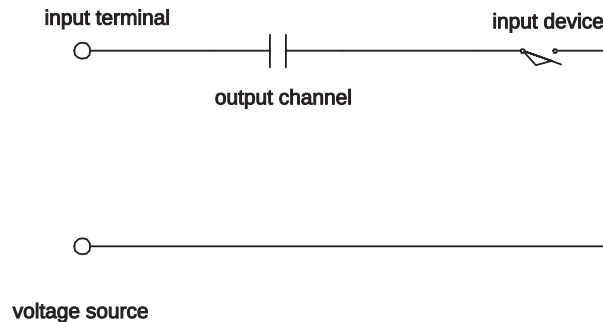
When using a controller in MODE 2 it may be desirable to disable the group input when the machine is not in motion. This would probably be when the machine is stopped for maintenance purposes. At this time you don't want to be able to trip the photo switch (or similar device).

To prevent this from happening, the input or the input device must be disabled. This can be accomplished by using an output channel as an enable for the input. Wire either the supply voltage wire to the input device, or the output wire from the device, in series with the output channel. Program the output channel to be ON-1/OFF-1, and motionAND it. This will cause the output channel to be ON at all times when the speed is at or above the motionANDING setpoint. When the speed falls below the minimum setpoint, the output channel turns OFF, and also turns OFF the input device, or doesn't allow the input signal to go to the input terminal.

See the wiring diagrams below for specific wiring information.



Output channel used to gate the supply voltage to the input device. It may be sinking or sourcing, depending on how the inputs and supply voltage source are wired.



Here the output channel is used to gate the input wire coming from the input device, going to the input terminal. This may also be sinking or sourcing, depending on how the inputs and supply voltage are wired.

SINKING or SOURCING (as pertaining to Electro Cam Corp. products)

Sinking means that when the logic is true and the output (or input device) is ON, the output (or input device) is providing a DC common or ground to the connected device.

Sourcing means that when the logic is true and the output (or input device) is ON, the output (or input device) is providing a +DC voltage to the connected device.

This information is important when interfacing an Electro Cam Corp. product with another electronic device. The terms **SINKING / SOURCING** are not used in the same context by all manufacturers. If you are using an Electro Cam Corp. product input to an Allen-Bradley 1746-IN16 "sinking" input card* or similar A-B device, you have to supply a +DC voltage to this card, NOT a DC common or ground. In these cases, **Sinking** is what the card does with the input voltage; sinks it to common or ground.

* Other manufacturers include, but not limited to: Koyo (formerly GE Series 1, Texas Instruments, or Siemens SIMATIC PLS's) that use descriptions similar to Allen-Bradley.