



# Using a Foot Pedal Connector to Control a Shutter with Auxiliary Controllers

The foot-pedal receptacle located in the rear right-hand corner of the Dymax light welders, and rear Dymax shutters, can be utilized to open and close the unit's shutter with auxiliary controllers other than the supplied foot pedal. Opening and closing shutters with an auxiliary controller can be achieved in various different configurations.

The simplest is to replace the foot-pedal or foot switch with another switch. Also, to wire connect the common contact of the switch via wire to the first pin of the foot-pedal receptacle. Depending on the application, wire the NO (Normally Open) or NC (Normally Closed) contact on switch to the second pin of the receptacle. The switch should be rated for a minimum of 12V 3A. It is recommended that the switch be single throw.

To use a PLC, Computer, or similar control device with the light welder or shutter the control device must be isolated. Isolation can be achieved with use of a relay. Most PLC's provide relay outputs. Wire the control device to operate the coils of the relay. Wire the common contact of the relay to the first pin of the foot-pedal receptacle and the NO (NC) contact to pin 2. The relay's contacts must be rated to handle 12V 3A.

An interlock switch may be wired into the foot-pedal or different auxiliary actuator. The interlock may be connected to a door or sensor which when open or broken closes the shutter. This method only works with manual mode. Wire the NC switch in series with auxiliary controllers and between pin 1 and pin 2. The interlock should be rated for 12V 3A and must be a NC type.

To wire multiple units to one foot-pedal or auxiliary actuator, a multiple pole relay must be used. Wire each unit to a separate pole on the relay.

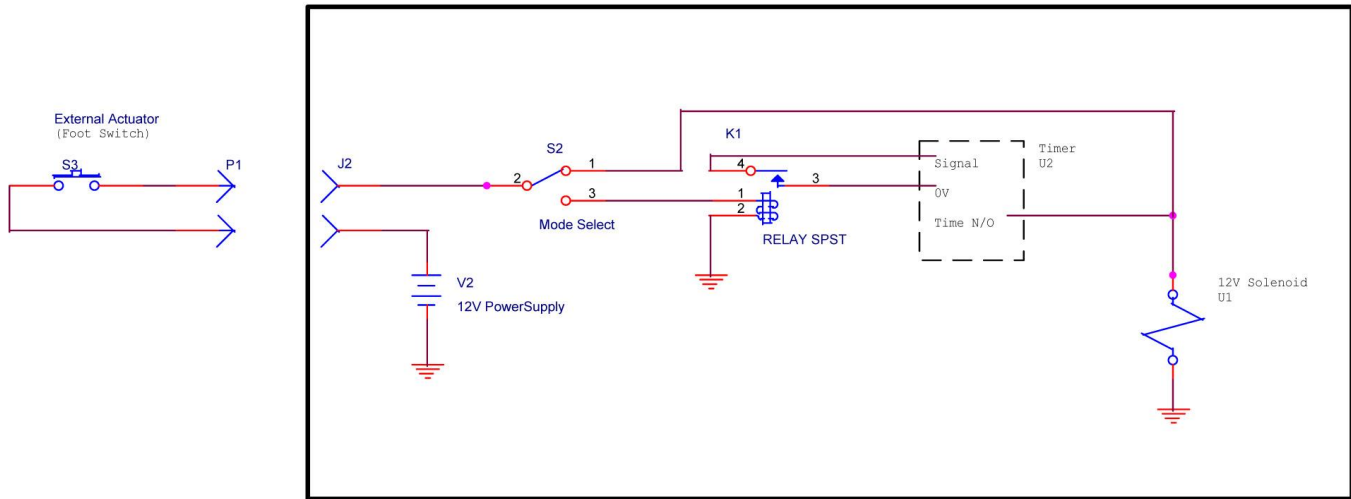
To wire multiple foot-pedals or auxiliary actuators simply wire them in parallel. For example, to wire a switch and a foot-pedal, wire both the foot-pedal common and switch common to pin 1; the other end of the contacts to pin 2.

Contacts on the foot-pedal receptacle are as follows:

**Pin 1 is 12V out**

**Pin 2 in 12V return**

**Figure 1. BlueWave® 200 Shutter Circuit**



200W BlueWave

Title	
200W BlueWave Shutter Circuit	
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