Triple State, Warning Indicator

This application presents a three state warning control that provides an off, blink or steady-state condition. The warning control advises of an alarm condition that can be acknowledged and reset to steady state without canceling the original warning signal. The warning unit also initiates and drives an accompanying aural alarm that is muted when the switch is pressed.

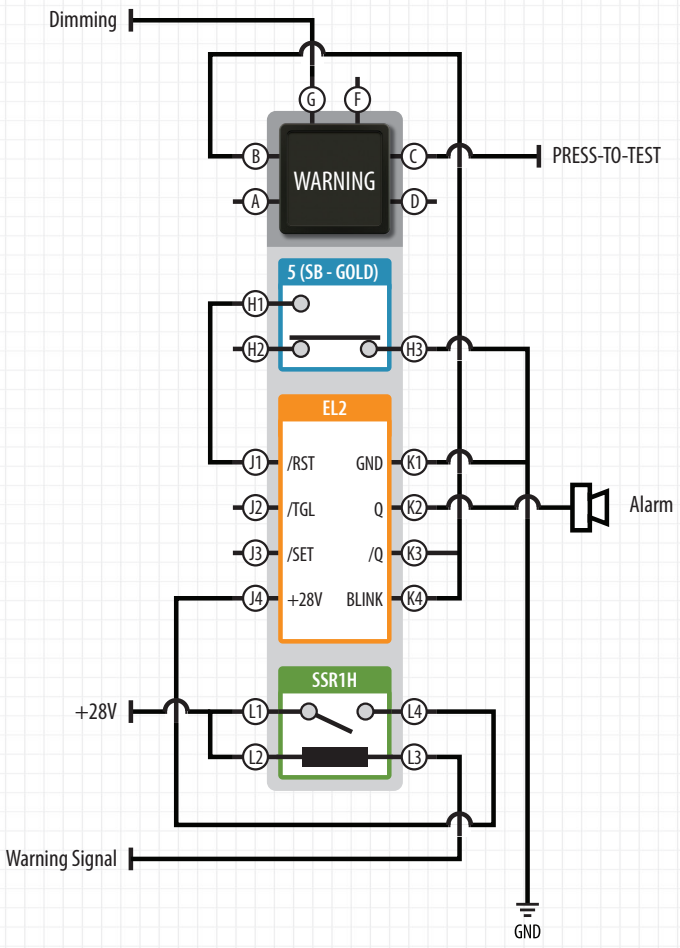
This application uses a single VIVISUN switch configured as a High Capacity Logic Body containing a single momentary switch pole, a NEXSYS Electronic Latch (EL2) and Solid State Relay (SSR1H).

When a ground signal is received from an alarm sensor the SSR1H is activated providing 28VDC to power up the EL2. The default EL2 power up state is the Q output (K2) at ground which initiates the aural and cockpit alarms and sets the /Q output (K3) at high impedance activating the BLINK output (K4) and causes the WARNING control indicator to blink. Depressing the momentary switch activates the Reset function /RST (J2) of the EL2 causing the Q output (K2) to transition to high impedance canceling the aural alarm and the blink function. The /Q output transitions to ground converting the blinking "WARNING" legend to steady on. The "WARNING" indication will remain illuminated until the alarm signal ground is cleared or power to the system is removed.

Power is not applied to the EL2 until a ground signal is received from the alarm sensor and pushing the switch without a ground signal present will have no effect and the WARNING indicator remains in a non-illuminated state.

This example also includes the optional illumination test circuit integrated into the cap. Grounding of the cap (Pin C) will illuminate all legends providing a press-to-test function. This application may also be expanded to include multiple alarm sensors and with the addition of additional LOGIC Components each alarm sensor is isolated assuring that a tripped alarm will not mask subsequent alarms.

To speak with our Technical Support team on how NEXSYS LOGIC Component Technology can be used to add avionics system capabilities or solve your system integration challenges call us at 1-888-848-4786.



To view online, visit logic.vivisun.com/index.html?APX=020