Dual Input Interface Control

Dual inputs control the operation of an external strobe light turning it ON or OFF from either the Pilot’s or Co-pilot’s position. The system performance is enhanced by providing an electrical buffer to assure ground integrity.

This example uses an in-line NEXSYS Module containing an (8-Pin) Electronic Latch (EL1), a (4-Pin) Solid State Relay (SSR1H) and a (4-Pin) Terminal Block (TB4). These components interface with the Pilot and Co-pilot control switches.

The default state is with /Q output (K3) of the EL1 at ground activating the strobe light relay. When either the Pilot’s or Co-pilot’s switch is selected a ground input is provided to the SSR1H (H3) which activates the /TGL input (J2) of the EL1 causing the /Q output (K3) to transition to high impedance canceling the strobe relay and turning the Strobe light off. Each time the Pilot’s or Co-pilot’s switch is depressed the strobe light alternates between on and off.

This application simplifies the activation of an external strobe light from two separate locations. The electrical hardware is contained in an in-line NEXSYS Module and the SSR1H buffering assures a steady signal ground. Additional control switches may be added to the design for control from additional locations such as in the wheel well for ground test. A Terminal Block component minimizes external jumpers and simplifies wiring.

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