Airbus 5VAC Illumination Control and Lamp Test

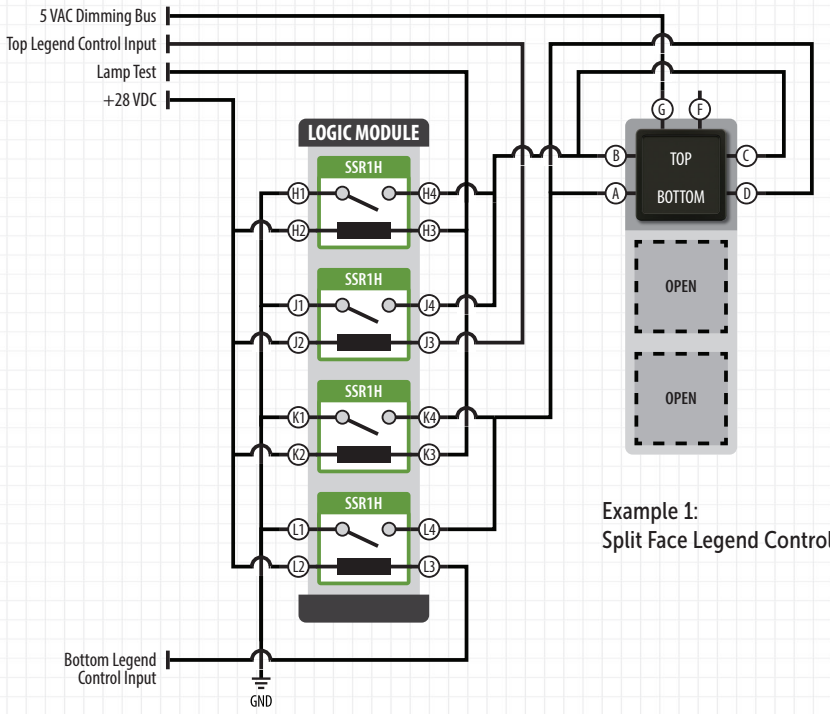
This application provides an option for adding control hardware to an existing Airbus 5VAC power system by interfacing DC control signals and lamp test inputs to illuminated pushbutton switches. Relay buffering is used to isolate the controls allowing the annunciators to be driven by the Airbus AC lighting Bus.

This application uses two NEXSYS Logic Modules each containing four (4-Pin) Solid State Relays (SSR1H). Each switch legend requires two SSR1H components, one controlling the illumination signal and one controlling the lamp test function.

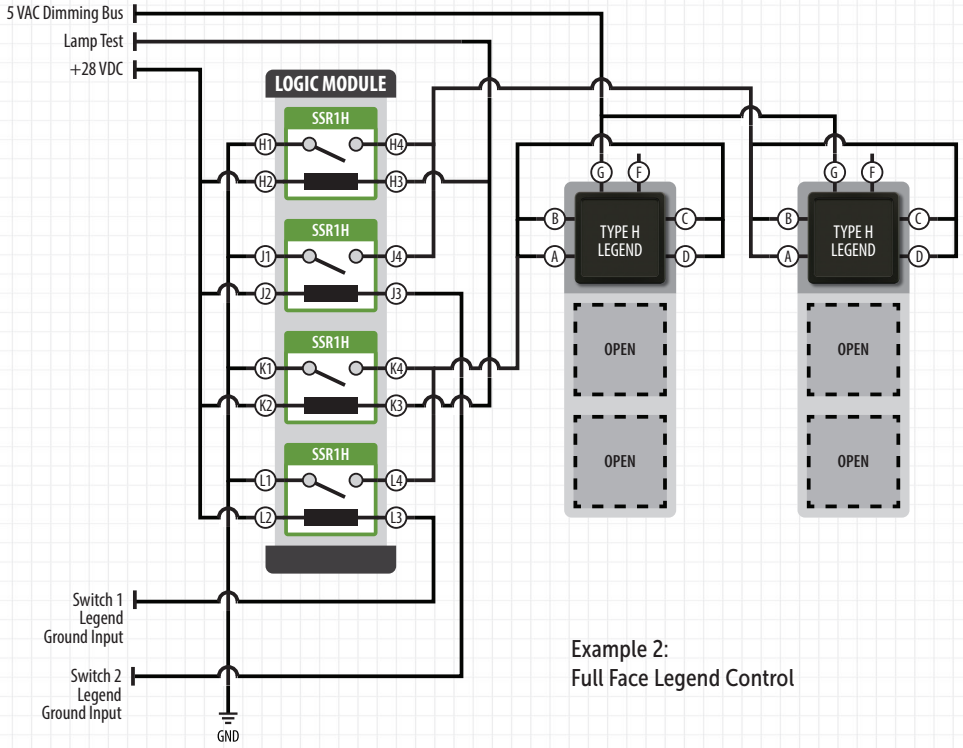
Each SSRH1 is provided 28V through the H2, J2, K2 and L2 input pins and the illumination or Lamp Test ground signal is provided to the H3, K3 inputs. The primary 5VAC lighting bus is connected to the common (G pin) on each switch. The signal ground input for illuminating the legends is provided to the J3 and L3 input pins. When J3 and L3 are ground, the relays close, connecting the legend to AC return illuminating the legend.

These circuit examples provide information on a Split Face top and bottom legend (Example 1) and a typical Full Face single illuminated legend (Example 2). The application may also have different packaging options depending upon the function of the illuminated switches. The LOGIC Modules may be eliminated and the SSR1H components integrated into the switches using a VIVISUN High Capacity Body. The SSR1H components could also be packaged in the Lamp Test switches as the configuration allows. This circuit may also be adapted to other applications where power and signal isolation is required.

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.



Example 1:
Split Face Legend Control



Example 2:
Full Face Legend Control

To view online, visit logic.vivisun.com/index.html?APX=014

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