

### Airfield Lighting Control System L-821 Control Panel

Most airports today would like to install the latest touch-screen based control and monitoring systems. However general aviation and smaller remote airports may not be able to afford these systems or have staff available for maintenance or support. For these airports, Liberty is pleased to offer a traditional pushbutton and rotary switch type control panel to control the airfield lighting circuits.

#### System Application

The Spirit Series™ L-821 Panel is a custom designed panel for General Aviation and small regional airports. The panel can be located in the air traffic control tower (ATCT), flight service station (FSS), airport manager's office, maintenance shop or electrical vault. System applications include:

- Control and monitoring of runway and approach lighting, taxiway lighting, rotating beacon, wind cone, apron floodlighting.
- Monitoring of diesel-generator and automatic transfer systems.

#### Standards Compliance

- FAA Advisory Circular 150/5345-3F, Specification for L-821, Panels for the control of airport lighting
- FAA Advisory Circular 150/5340-30, Design and Installation Details for Airport Visual Aids.
- ICAO Annex 14, Volume 1, Aerodrome Design and Operations.
- ICAO Aerodrome Design Manual Doc 9157, Part 5.
- Transport Canada Aerodrome Standards and Recommended Practices, Volume 1, TP-312E.
- Canadian Department of National Defence Standards.



Fig. 1 L-821 Panel with airfield graphic, 9 illuminated pushbuttons, 5 brightness selector switches, 7 LED circuit indicator lights, 3 alarm pilot lights.

#### Features and Capabilities

- On/off green pushbuttons are provided for each airfield lighting circuit or system (runway, taxiway, approach). Pushbuttons can optionally be illuminated to indicate which system has been selected.
- Rotary brightness control switches are provided for each circuit or system requiring 3 or 5 brightness step control.
- Actual on/off status of circuits can be displayed using LED indicator lights when optional current present monitoring is provided.
- Illuminated red pilot lights can optionally be provided to indicate a problem with a regulator or other device located in the electrical vault.
- A graphic representation of the airfield can be provided as reference to the operator. Circuit indicating lights can be located on the graphic providing visual indication of which circuit is on.
- The L-821 panel can be flush-mounted in the existing console, surface mounted on any desk or suitable surface, or mounted on a wall.
- For more complex requirements, the L-821 panel can be connected to an interface relay panel or to a Programmable Logic Controller (PLC) system. This allows pushbuttons to control multiple circuits or to accommodate pre-programmed runway visibility (RVR) range settings.

### Ordering Information

**Type:**

- I - Conventional
- II - With airfield graphic displayed

**Class:**

- F - Flush Mount (into existing console)
- S - Surface mount console (set on desk)
- W - Wall mount console

**Style:**

- 1 - Unlighted
- 2 - Illuminated pushbuttons & circuit LED's

**Mode:**

- 1 - Generic (Main) Panel

**Circuit Details:**

- Number of Single Step Circuits (Enter Qty)
- Number of 3 Step Circuits (Enter Qty)
- Number of 5 Step Circuits (Enter Qty)
- Generator Control Required (Enter Y or N)
- Generator Inputs Required (Enter Qty)
- Other Monitoring Inputs Required (Enter Qty)

**Options (Select as Many as Required):**

- 01 - On/off Current Monitoring for each circuit (Style 2 Only)
- 02 - Interface Relay Panel
- 03 - PLC Interface Panel
- 04 - Printed Manual

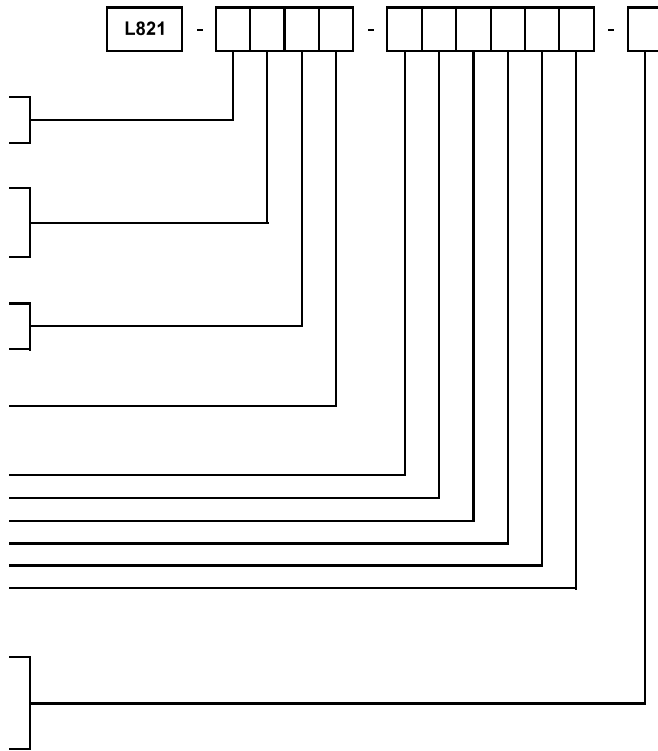


Fig. 2 Terminal blocks provide convenient connection points for customer's wiring to electrical vault equipment.



Fig. 4 L-821 Panel mounted in vault next to interface panel.

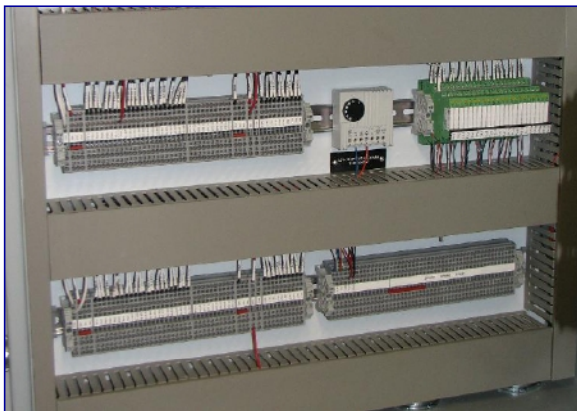


Fig. 3 Optional interface relay panel for complex applications.



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