ILS SYSTEM
INTEGRATED LIGHT & SWITCHBOARD
Integrated LED Technology

Multiple Applications

The Integrated Burner Control Subpanel and LED Switchboard provides a wiring interface between the flame safeguard and combustion equipment reducing the potential for wiring errors and improving quality. The LED switch panel is mounted to the front of the control panel and connects to the Integrated Burner Control Subpanel using interconnecting cables. It provides power, fuel selection and auto/manual burner control along with visual indication of the burner sequence. The system consists of the Integrated Burner Control Subpanel, the LED Switch Panel from the front panel and the corresponding overlay and interconnecting cables.

Reducing *wire traffic*, improving quality; what a *bright* idea

- **A unique subpanel design** covers multiple applications and reduces extensive wiring in the control panel.
- **LED switch panel** provides visual indication of burner sequence and firing rate display on the front of the panel.
- **Standard alarm silencing** with three optically isolated alarm outputs to include burner alarm, limit alarm and auxiliary alarm.
- **Access slots are provided** for electrical measurements on the relay module.
- **Local remote switch** is provided for burner enable/disable from building management systems.
- **Manual firing rate** potentiometer is integrated to allow for precise manual control of the burner.
A Visual Indication

The LEDs provide the following information:

**Power On** - white LED indicates presence of control power in the subpanel.

**Call for Heat** - white LED indicates that a demand for burner startup is present.

**Ignition** - white LED indicates the burner is in the ignition phase of operation.

**Main Fuel** - Dual color LED that indicates that the main fuel valve(s) are powered.
   - Dual fuel mode: Green light - gas valves are open
   - Amber/Yellow light - oil valves are open
   - Single fuel mode: Amber light only

**Burner, Limit and Auxiliary Alarm** - Red LED indicates what equipment section is in an alarm condition.

**Modulation Indicator** - LED's provide a reference to the current firing level of the burner in either the automatic or manual mode of operation. The LED’s go from the bottom to the top (horizontal faceplate), left to right (vertical orientation) with the first LED always being illuminated.

The Modulation Indicator will have the following colors:
   - LED 1-2 (25%): white
   - LED 3-4 (50%): yellow
   - LED 5-6 (75%): blue
   - LED 7-8 (100%): green

**NOTE:** This LED bar indicator is a reference to firing rate position, not an actual indication of the firing position.

The switches provide the following operational control:

**Burner Switch** - position switch that switches the burner from local demand (on), to off, and remote demand settings.

**Fuel Select (dual fuel systems)** - provides a safe fuel change from one fuel to the other.

**Modulation Mode** - enables the operator to select automatic and manual flame control.

**Manual Flame Control** - a Potentiometer used to adjust the burner firing rate when the Modulation Mode is in ‘Manual’ position.

**Alarm Silence** - a momentary switch used to silence an audible alarm but still maintain the LEDs indicating the equipment section that is in the alarm condition. The up position is normal, push down and release the switch to silence the audible alarm.
Product Specifications

**Electrical Ratings**
Power: 120 Vac (+10%/-15%), 50/60 Hz (±10%)

**Environmental Ratings**
Ambient Temperature Ranges:
- Operating: -40°F to +140°F (-40°C to +60°C)
- Storage: -40°F to +150°F (-40°C to +66°C)
Humidity: 85% relative humidity, continuous, non-condensing
Vibration: 0.5G

**Weight**
Burner Control Subpanel: 1 lb., 12 oz. (871 grams)
LED Switch Panel: 4 oz. (124 grams)

**Dimensions**
See Figure 1 & 2

**Enclosure**
NEMA 1

**Approvals**
Underwriters Laboratories, Inc. (component cULus)
Listed: File No. MP268 Vol. 31 Sec. 2

**Models Available**
Single and dual fuel for the following modes of operation:
- On/Off
- Low-High-Low
- 135 ohm Full Modulation
- 4-20 mA Full Modulation
- 4-20 mA Full Modulation (R7999 Control Links)

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