

## FIRE ALARM CONTROL UNIT

## FIRE ALARM CONTROL UNIT TWO ZONE

### DESCRIPTION

ESL Model 101-00 Dual Fire Alarm Control Unit is a compact control panel featuring solid state circuitry, one (1) 2 amp indicating circuit, battery charger, and space for a 24V rechargeable battery.

Two supervised Class B detection zones are provided. These are compatible with two wire smoke detectors (see ESL Bulletin 2315-TA), and listed initiating devices with one (1) normally open contact. Supervision includes ground detection on initiating, signal and remote trouble indicator circuits; detection of a short circuit fault on the alarm signal circuit; detection of an open in the alarm initiating or alarm signal circuits; and loss of AC power. The ground detection circuit can be disabled by removing a plug. Isolated Form C (SPDT) contacts are provided for both trouble and alarm. With optional plug-in Remote Station Relay (Model 101-03), an alarm may be automatically transmitted to a remote station. When an alarm is initiated, the polarity (24 VDC, 24 mA maximum) of the voltage to the receiving equipment will reverse (6 mA with 3K ohm load).

Safe, dead-front construction guards against electrical shocks. Live wires, terminals and connections are not exposed under normal operating conditions. An earth ground for each control panel installation provides additional protection. The control panel is housed in a heavy gauge steel cabinet with an off-white finish. Operating controls on the control unit faceplate are behind a durable, locked access door.

Panel status is indicated by four LEDs visible through the access door: A green "AC Power On" lamp, a yellow "System Trouble" Lamp and two red "Zone Alarm" lamps (one for each alarm receiving zone).

Five manual switches perform the following functions:

1. Alarm Silence
2. System Reset (Momentary)
3. Battery Test
4. Trouble Silence
5. Fire Department Disconnect

Any switch in an abnormal condition will cause a trouble indication. Terminal strips are provided for all field wiring.

### APPLICATION

The 101-00 Control Unit is a 24 VDC dedicated nonexpandable control that accommodates as many as two alarm initiating circuits and one signal indicating circuit. The 101-00 is designed for use in small and medium size commercial, institutional, and industrial occupancies where life-safety or asset protection is the primary concern.

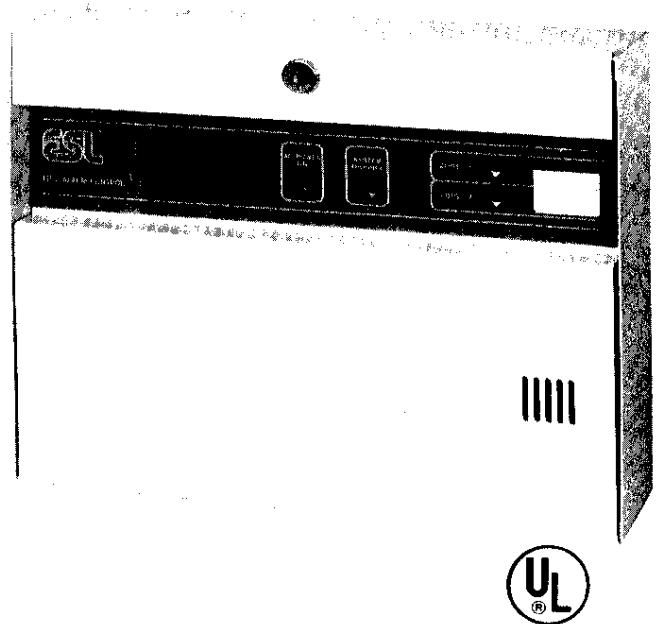
### INSTALLATION

The panel may be surface or semi-flush mounted. Convenient knockouts are provided. Attractive woodgrain side panels (101-05) are an option for the surface-mount model. Decorative aluminum trim (101-06) is available for semi-flush mounting.

The 101-00 control panel connects directly to a dedicated 120 VAC, 60 Hz branch circuit with suitable overcurrent protection.

### APPROVALS

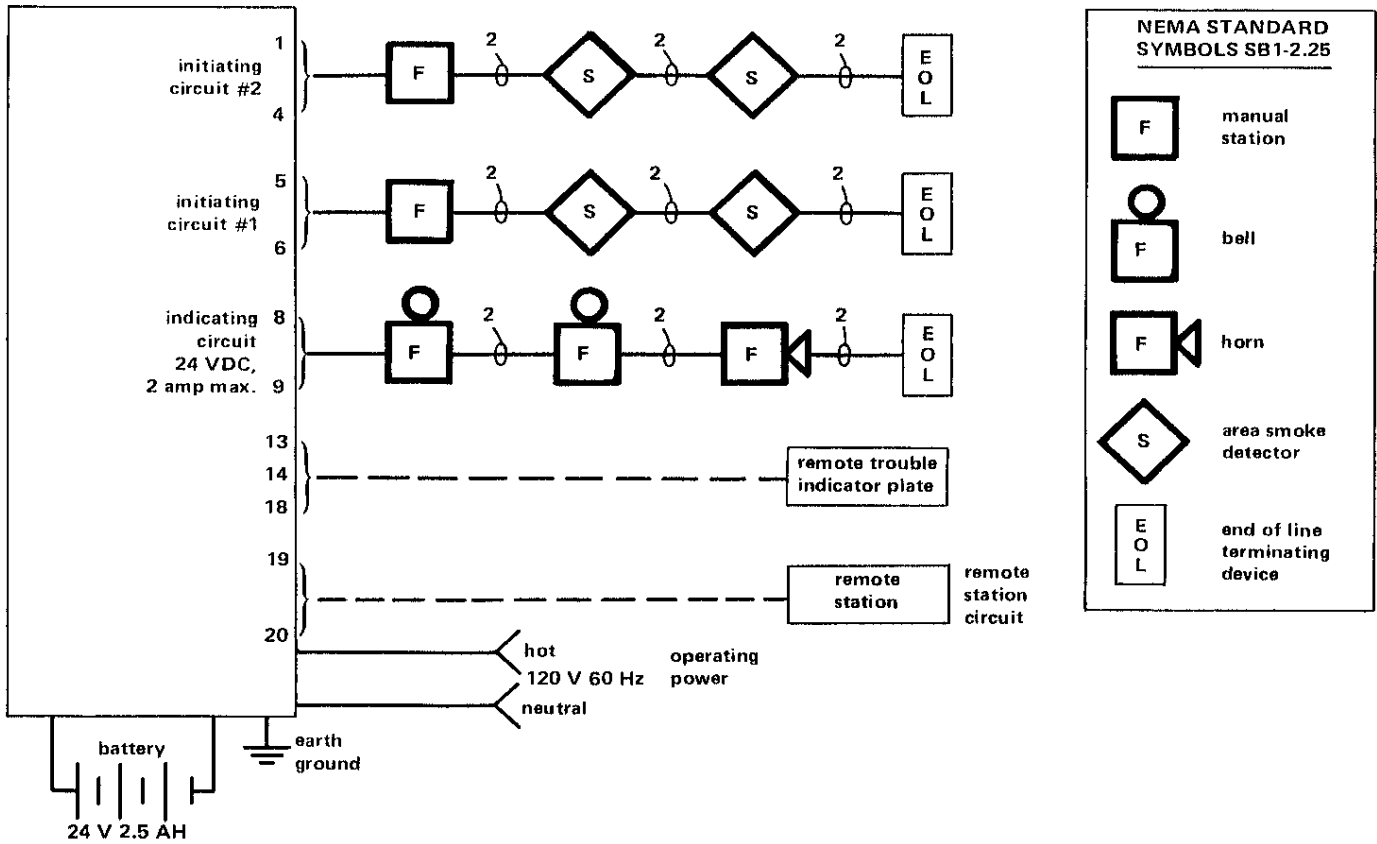
The 101-00 is UL listed and meets the requirements of NFPA 72A Local Protective Signaling Systems. With optional plug-in relay (101-03), the panel also meets NFPA 72C Remote Station Protective Signaling Systems.



- Two zone
- Battery standby
- NFPA 72A and 72C
- Alarm silence switch
- Reset switch
- Battery test switch
- Trouble silence switch
- Fire department disconnect switch
- Common alarm contacts
- Common trouble contacts
- Ground detection
- UL listed

# WIRING DIAGRAM

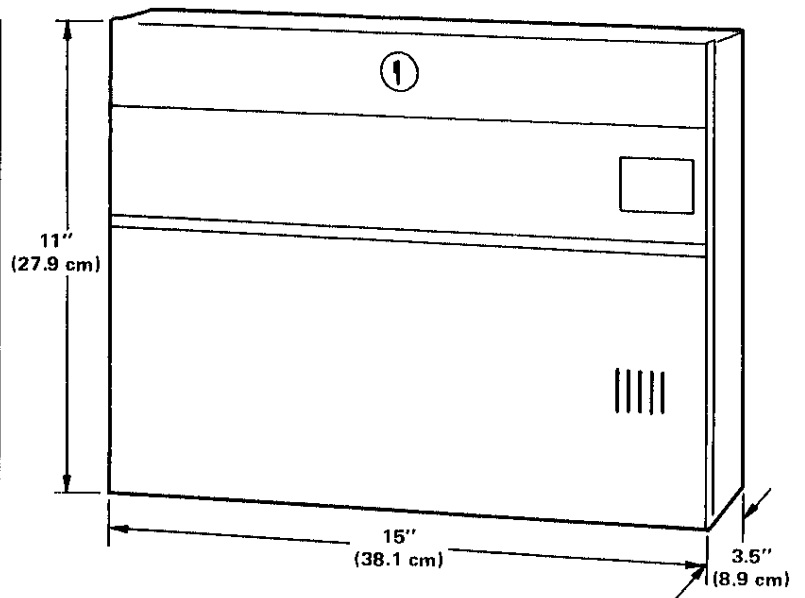
101-00 FIRE ALARM CONTROL UNIT



## ACCESSORIES

model number	description
101-03	DPDT relay; plugs into control unit printed circuit board to provide output for polarity reversal remote connection station.
101-05	Wood-grained side panels for surface-mounted control unit; hardware included.
101-06	Brushed aluminum trim for semi-flush mounted control unit; hardware included.
101-04	Remote trouble indicator plate with audible device, LED indicator and normal/silence toggle switch; requires back box for recessed mounting.
101-02	End-of-line resistor with spade lugs (three provided with fire alarm control unit).
101-07	Terminal cover.
102-01	Gates battery; 12 VDC; 2.5 AH; two required.

## DIMENSIONS

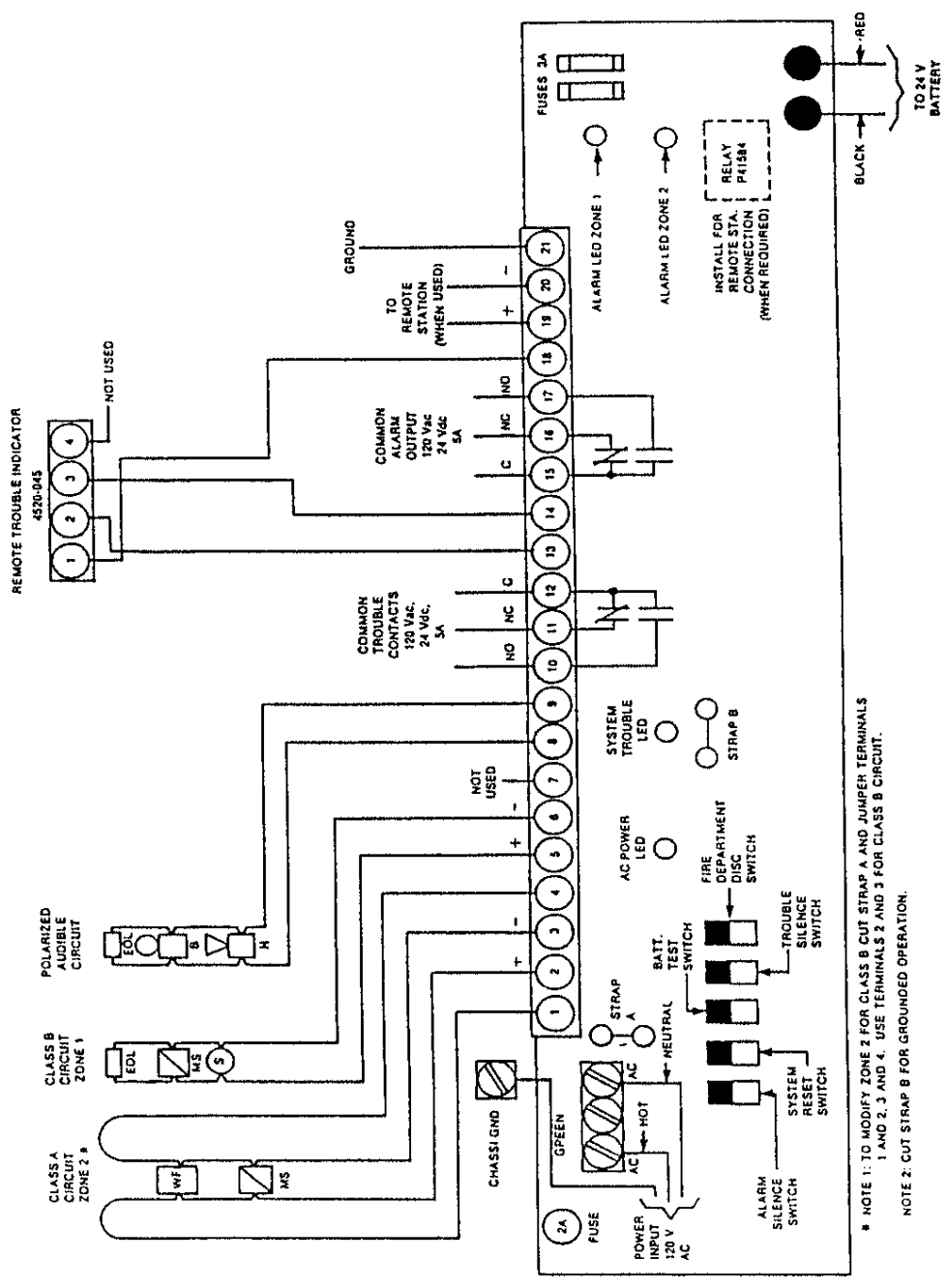


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distributed by:

# External Field Wiring

*EOL = 4.02k Ω*



\* NOTE 1: TO MODIFY ZONE 2 FOR CLASS B CUT STRAP A AND JUMPER TERMINALS 1 AND 2, 3 AND 4, USE TERMINALS 2 AND 3 FOR CLASS B CIRCUIT.  
 NOTE 2: CUT STRAP B FOR GROUNDED OPERATION.