

# **System Accessories, LCD Annunciators**

A4606-9102 LCD Annunciator for 4010ES Fire Alarm Control Panels

# **Features**

# Remote LCD annunciator for use with Autocall model 4010ES fire alarm control panels

#### LCD readout provides:

- · Two lines of 40 characters each
- · Wide viewing angle, super-twist design
- LED backlighting

#### Control switches and status LEDs for:

- Alarm, Priority 2, Supervisory, or Trouble acknowledge (keyswitch access controlled)
- Alarm silence, System reset
- Three programmable control switches with yellow LEDs and provisions for custom labeling

#### Additional features:

- Information is transmitted over a single unshielded twisted pair; separate wiring is required for 24 VDC control panel power (see A4606-9102 LCD Annunciator Specifications for more information)
- Tone-alert sounder provides local audible indication
- Lamp and LCD are functionally tested each time the keyswitch is turned on
- · Mounts flush on standard 6-gang electrical box
- Up to up to 20 internal and external card addresses per 4010ES fire alarm control panel

# Mounting and trim options (ordered separately, see Table 4 for more details):

- · Surface mount box model 2975-9206
- Brushed stainless steel trim model A4603-9111

#### Description

#### Local Annunciation.

A4606-9102 LCD Annunciator allows 4010ES fire alarm control panels to provide information and control switches at convenient locations away from the control panel. The LCD is an 80 character, back-lit, alphanumeric display with information presented in clear and descriptive English. Typical content includes: point status (alarm, trouble, etc.), alarm type (smoke detector, manual station, etc.), number of system alarms, supervisory conditions, troubles, and custom location labels up to 40 characters long.

#### Communications.

Data communications require a single unshielded twisted pair that supports other annunciators on the same communications channel.

#### Indications.

Alarm, Priority 2, Supervisory, and Trouble conditions are also indicated by dedicated LEDs and a tone-alert audible indication. Each condition has a dedicated acknowledge push-button switch that silences the tone-alert but leaves the LED on until all conditions in that category are restored to normal.

#### **Activity Scrolling.**

Repeated operation of the appropriate acknowledge switch will scroll the LCD display showing activity in the sequence of occurrence. The internal tone-alert also sounds to indicate the operation of any of the push-button switches.

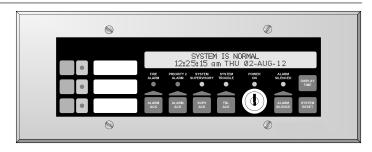


Figure 1: A4606-9102 LCD Annunciator

#### Operation

**Keyswitch Access.** All switches on the annunciator are controlled by the "ENABLE" keyswitch with a key that is removable only in the disabled position. A brief Lamp/LCD test is performed whenever the keyswitch is changed from enabled to disabled.

**Enabled Operations.** When enabled, notification appliances can be deactivated by pressing the "ALARM SILENCE" switch. Pressing the "SYSTEM RESET" switch restores the system to normal operation. When system activity is normal, the LCD displays the time, date, and "SYSTEM IS NORMAL."

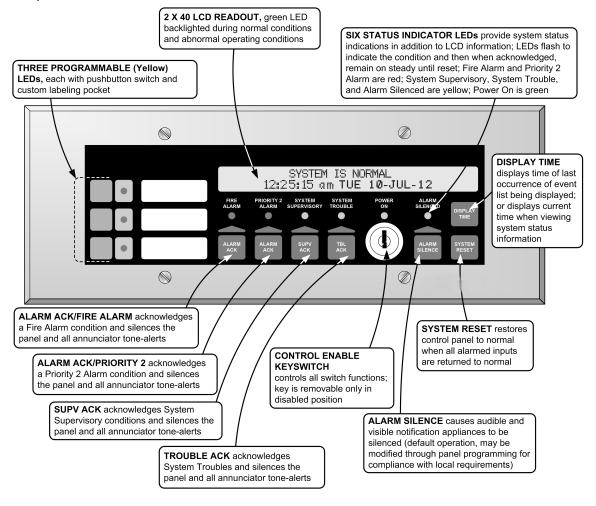
<sup>\*</sup> Additional listings may be applicable; contact your local product supplier for the latest status.



#### **Product Selection**

SKU	escription		
A4606-9102	Remote LCD Annunciator with beige trim for use with 4010ES fire alarm control panels	D (	
A4603-9111	Brushed stainless steel trim option	Refer to A4606-9102 LCD Annunciator Specifications for additional details	
A4610-9111CA	bi usi ieu staii iess steel ti iiri optiori	Specifications for additional details	
2975-9206	Matching surface mount box; ivory finish		
A2081-9044	Overvoltage protector; required where annunciator communications and power wiring exits and enters a building; refer to data sheet <i>AC2081-0016</i> for details		

# A4606-9102 Operator Information



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# A4606-9102 LCD Annunciator Specifications

### Table 1: General Operating Specifications (refer to Installation Instructions 579-977AC for additional information)

Specification	Details
Voltage	18 to 32 VDC, system supplied
Normal Operating Current	110 mA (with LED backlighting on)
Battery Standby Current	65 mA (during battery backup, LED backlighting is turned off after 30 seconds without switch activity)
Alarm Current	140 mA maximum (LED backlighting is on and tone-alert is sounding)
Operating Temperature Range	32° to 120° F (0° to 49° C)
Operating Humidity Range	Up to 93% RH, non-condensing at 100° F (38° C)

### **Table 2: Communications**

For 4010ES Panels*		
Type	RUI (Remote Unit Interface) external annunciator communications line SLC (signaling line circuit)	
Capacity	Up to 20 total internal and external card addresses	

# **Table 3: Wiring Requirements**

Specification		Details
	Standard Wiring Type	Unshielded twisted pair (UTP), 18 AWG (0.82 mm <sup>2</sup> ) for most applications, see below
	Wiring Characteristics	0.58 μF (580 nF) maximum capacitance between conductors; 35 Ω maximum total line resistance
RUI Data	Wiring Applications Requiring Shielded, Twisted Pair (STP)	Wiring that leaves the building. Also requires Isolated Loop Circuit Protectors on each end, refer to data sheet AC2081-0007 for A2081-9027 (200 mA), or <i>S2081-0008</i> for A2081-9028 (5 A)  Wiring run in 500 ft (152 m) or more of conduit.  Wiring closely bundled with standard IDNet communications or TrueAlert addressable communications (not required when run with IDNet+ communications).
	Class B "T-Tap" wiring distance	Up to 10,000 ft (3048 m) total wiring; up to 2500 ft (762 m) to farthest device
	Class X wiring distance	Up to 2500 ft (762 m)
Power Wiring		18 to 12 AWG (0.82 mm <sup>2</sup> to 3.31 mm <sup>2</sup> ) wires for 24 VDC system power
Earth Wiring		A dedicated earth ground connection to the electrical box is required for proper ESD and EMI protection; wire in accordance with NFPA 70 (National Electrical Code) Article 250

# **Table 4: Mounting Information**

Specification		Details
Trim Dimensions		4 ½" H x 11 <sup>13</sup> / <sub>16</sub> " W (114 mm x 300 mm)
Assembly Depth		1 <sup>5</sup> / <sub>16</sub> " (33 mm), 1 ½" at terminal block location (38 mm)
Standard Trim Finish		Steel, painted beige
A4603-9111, Optional Trim		Brushed stainless steel (ordered separately); supplied with both slotted and tamper resistant screws
Boxes for Flush Mounting (supplied separately)	Masonry boxes	Six-gang box, Steel City GW-635-G, 3 ½" (89 mm) deep or equal
	Single gang boxes	Six, single gang boxes, 3 ½" (89 mm) deep minimum, RACO # 590 or equal
	Box selection note	Conduit entrance is box dependent, refer to Installation Instructions 579-977AC for additional mounting information and conduit entry requirements
2975-9206, Surf	ace Mount Box Option	(ordered separately)
Dimensions		12" W x 4 %" H x 2 ¾" D (305 mm x 117 mm x 70 mm)
Finish		Painted steel, ivory finish

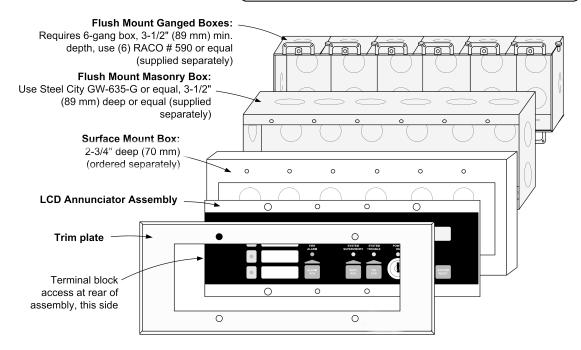
**Note:** \* Refer to the 4010ES control panel data sheet for additional panel information.

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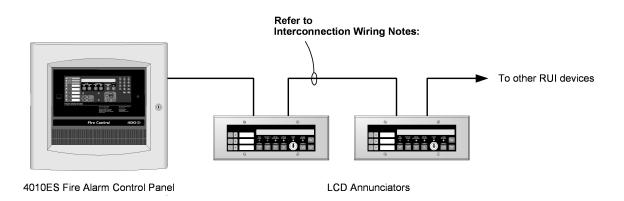


# **Mounting Information**

Note: Review box choice with assembly layout before selecting conduit entrance location to allow easy access to terminals



## **Wiring Reference**



# **Interconnection Wiring Notes:**

- 1. Communications require 18 to 12 AWG unshielded twisted pair.
- 2. Power requires two, 18 to 12 AWG wires for 24 VDC system power, plus Earth Ground to each electrical box.
- 3. Refer to Installation Instructions 579-977AC for additional wiring specifications.

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