Simplex

System Accessories, LCD Annunciators

*UL, ULC Listed; FM, CSFM, and MEA (NYC) Approved**

4603-9101 LCD Annunciator for 4100ES and 4100U Fire Alarm Control Panels

Features

Remote LCD annunciator for use with Simplex® model:

- 4100ES and 4100U fire alarm control panels
- Legacy products 4100, 4120, and 4020 fire alarm control panels, and 4100/4120 Universal Transponders

Information display features:

- Maintained display of first alarm is available with 4100ES and with 4100U at software revision 11.11 or higher
- Wide viewing angle, super-twist LCD technology with green LED backlighting
- Two lines of 40 characters each
- LED status indicators
- During battery backup, backlighting is disabled until there is switch activity

Controls include:

- Switches for system acknowledge, alarm silence, and system reset
- Four programmable control switches
- Lamp/LCD test

Wiring information:

- RUI (Remote Unit Interface) communications require a single twisted wire pair (see p. 3 for more information)
- Separate wiring is required for 24 VDC control panel power

Flush mount on standard electrical boxes

Options:

- 2975-9206, Surface mount box
- 4603-9111, Brushed stainless steel trim

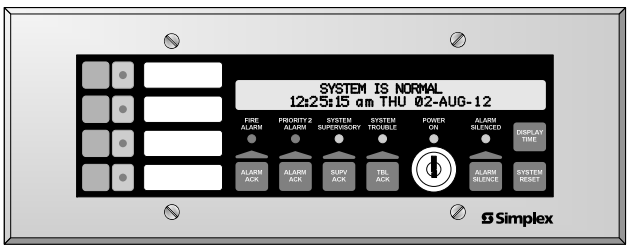
UL Listed to Standard 864

Description

Remote Control and Annunciation is provided using an 80 character, back-lit, alphanumeric display. Information is presented in clear, descriptive English language and includes: **Point Status** (alarm, trouble, etc.); **Alarm Type** (smoke detector, manual station, etc.); **Number of System Alarms**, **Supervisory Conditions**, and **Trouble Conditions**; and a **Custom Location Label**.

Wiring. A single twisted wire pair provides serial RUI communications that also supports other Simplex serial annunciators on the same wire pair.

Multiple Indications. Alarm, Supervisory, and Trouble conditions are also indicated by dedicated LEDs and a tone-alert audible sounder. 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. Switch operation is either globally or individually acknowledgeable, determined by the control panel operation.



4603-9101 LCD Annunciator

Description *(Continued)*

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

Consult local code requirements for guidance in determining applications and location of the 4603-9101 LCD annunciator.

Operation

System Controls. Notification appliances can be deactivated by pressing the "ALARM SILENCE" switch. (Exact operation is determined by the host control panel such as visible appliances remaining on until system is reset.) 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."

Control Switches. Four programmable "CONTROL" switches and associated LEDs are included. Typical applications include manual evacuation, door holder release bypass, and elevator capture bypass.

Keyswitch Enable. 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.

Battery Backup Operation. During battery backup, the LED backlighting is disabled to conserve battery power. When an annunciator switch is activated, the backlighting is automatically enabled. After approximately 30 seconds of inactivity, the backlighting will again be disabled.

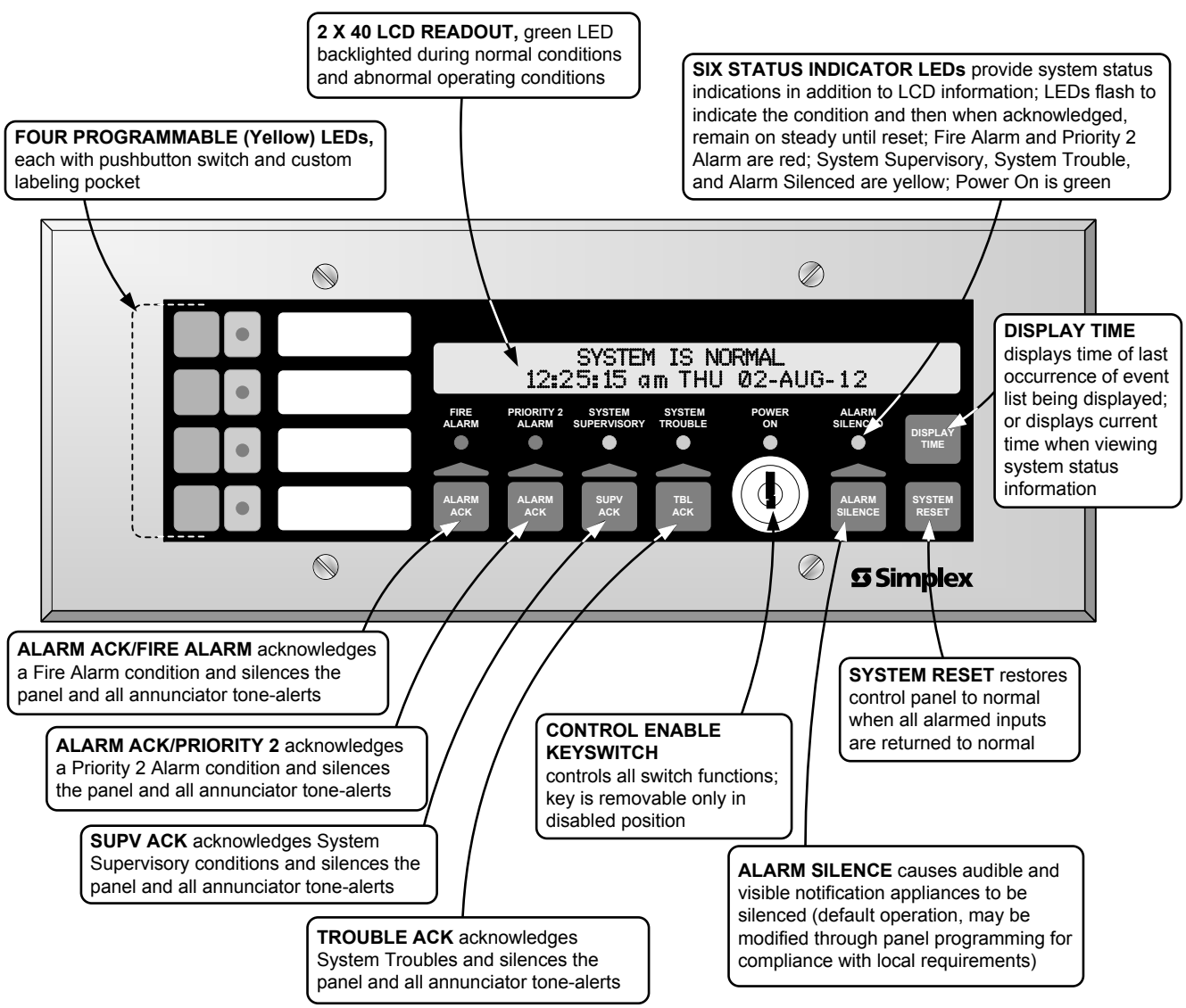
* This product has been approved by the California State Fire Marshal (CSFM) pursuant to Section 13144.1 of the California Health and Safety Code. See CSFM Listing 7120-0026:0179 for allowable values and/or conditions concerning material presented in this document. It is subject to re-examination, revision, and possible cancellation. Accepted for use – City of New York Department of Buildings – MEA35-93E. Additional listings may be applicable; contact your local Simplex product supplier for the latest status. Listings and approvals under Simplex Time Recorder Co. are the property of Tyco Fire Protection Products.

Y TECHNOLOGY | ytechnologysys.com

Product Selection

Model	Description	
4603-9101	Remote LCD Annunciator with beige trim	Refer to specifications on page 3 for additional details
4603-9101CF	Remote LCD Annunciator with beige trim, with French keypad for Canada	
4603-9111	Brushed stainless steel trim option	
2975-9206	Matching surface mount box; ivory finish	
2081-9044	Overvoltage protector; required where annunciator communications and power wiring exits and enters a building; refer to data sheet S2081-0016 for details	

4603-9101 Operator Information



Y TECHNOLOGY | ytechnologysys.com

4603-9101 LCD Annunciator Specifications

For additional information, refer to Installation Instructions 579-979.

General Operating Specifications	
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)

Communications		
4100ES/4100U Capacity, Per RUI Output	Type	RUI (Remote Unit Interface) external annunciator communications line SLC (signaling line circuit)
	Capacity	Up to 31 remote annunciators/MINIPLEX transponders per channel including the 4603-9101 LCD Annunciator, the 4602-9101 Status Command Unit (SCU), and 4602-9102 Remote Command Unit (RCU); refer to data sheet S4100-0031 for additional 4100ES information

Wiring Requirements		
RUI Data	Standard Wiring Type	Unshielded twisted pair (UTP), 18 AWG (0.82 mm^2) for most applications, see below
	Wiring Characteristics	0.58 µF (580 nF) maximum capacitance between conductors; 35 Ω maximum total line resistance
	Wiring Applications Requiring Shielded, Twisted Pair (STP)	1. Wiring that leaves the building. Also requires Isolated Loop Circuit Protectors on each end, refer to data sheet S2081-0007 for 2081-9027 (200 mA), or S2081-0008 for 2081-9028 (5 A) 2. Wiring run in 500 ft (152 m) or more of conduit. 3. 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^2 to 3.31 mm^2) 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

Mounting Information	
NOTE: General Conduit Entrance Requirement	Conduit entrance must be located a minimum of 2 ¾” (70 mm) from the front of the box to clear assembly
Trim Dimensions	4 ½” H x 11 $^{13}/_{16}$” W (114 mm x 300 mm)
Standard Trim Finish	Steel, painted beige
4603-9111, Optional Trim	Brushed stainless steel (ordered separately); supplied with both slotted and tamper resistant screws
Boxes for Flush Mounting (supplied by others)	6-Gang, 3 ½” (89 mm) deep: Steel City GW-635-G, 6-gang masonry box; RACO 590, gangable switch box, 6 required; or equal

2975-9206, Surface Mount Box Option (ordered separately)	
Dimensions	11 $^{31}/_{32}$” W x 4 ⅝” H x 2 ¾” D (304 mm x 117 mm x 70 mm)
Finish	Painted steel, ivory finish

Y TECHNOLOGY | ytechnologysys.com

Mounting Information

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

Flush Mount Ganged Boxes:
Requires 6-gang box, 3-1/2" (89 mm) min. depth, use (6) RACO # 590 or equal (supplied separately)

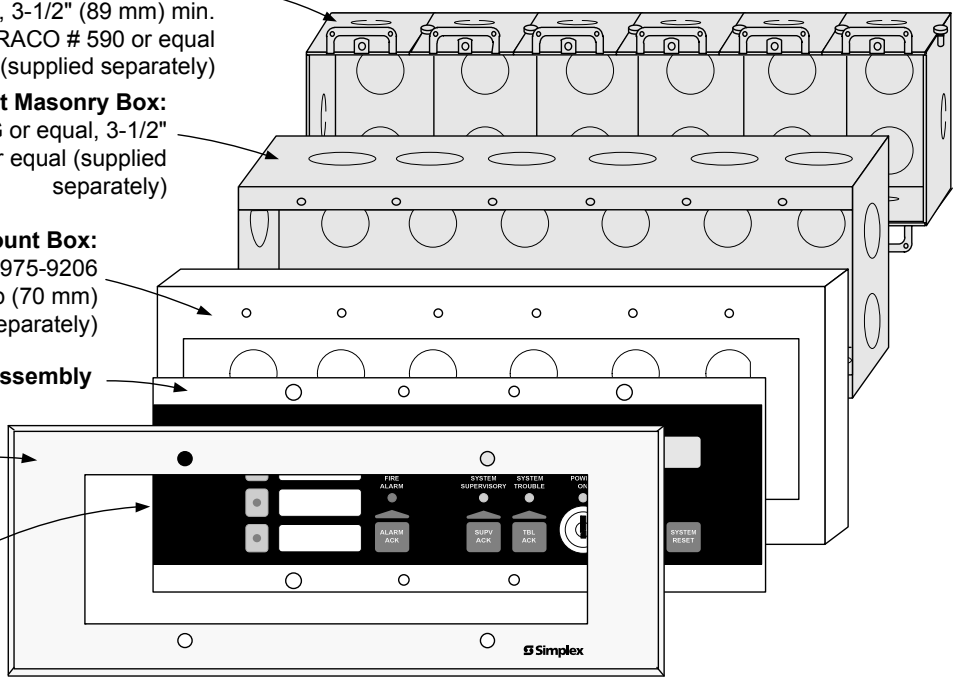
Flush Mount Masonry Box:
Use Steel City GW-635-G or equal, 3-1/2" (89 mm) deep or equal (supplied separately)

Surface Mount Box:
Simplex model 2975-9206 2-3/4" deep (70 mm) (ordered separately)

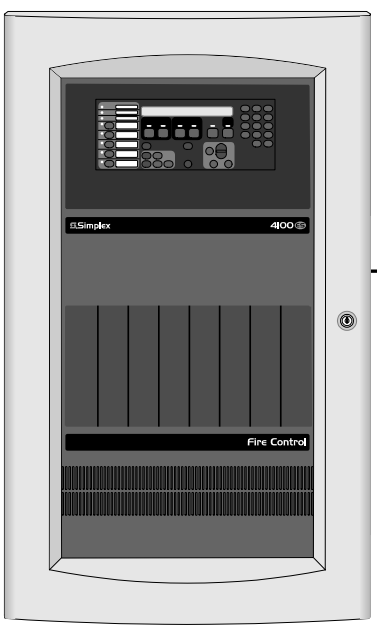
LCD Annunciator Assembly

Trim plate

Terminal block access at rear of assembly, this side



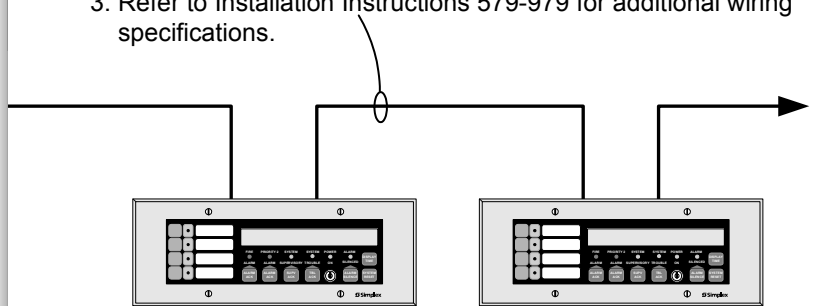
Wiring Reference



Fire Alarm Control Panel
(4100ES shown)

Wiring Notes:

1. Communications require a single 18 AWG 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 579-979 for additional wiring specifications.



4603-9101 LCD Annunciators

TYCO, SIMPLEX, and the product names listed in this material are marks and/or registered marks. Unauthorized use is strictly prohibited. National Electrical Code and NFPA are registered trademarks of the National Fire Protection Association (NFPA).

© 2016 Tyco Fire Protection Products. All rights reserved. All specifications and other information shown were current as of document revision date and are subject to change without notice.

Y TECHNOLOGY | ytechnologysys.com