Simplex®

Multi-Application Peripherals

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

24 Point I/O Annunciator Modules for use with the 4010 Fire Alarm Control Panel

Features

Programmable input/output module for use with the model 4010 Simplex® addressable fire alarm control panel:

- 4605 Series Models provides 24 input/output (I/O) points per module with each point selectable as either an input or an output

Four input switch types are supported:

- Unsupervised switch connection
- Supervised for open to switch circuit
- Supervised for open or short to switch circuit
- Monitored three position H.O.A. (hand-off-auto)

Monitored switches may be:

- Normally open (N.O.) or normally closed (N.C.)
- Momentary or maintained

Outputs:

- Rated 24 V at 75 mA each for operation of relays, incandescent lamps, or current limited LEDs
- Selectable for continuous on, or slow or fast flash

Modules communicate with the 4010 control panel using N2 serial communications:

- Up to six total annunciators are supported
- Compatible annunciators include the 24 I/O module, the 4606-9101 LCD annunciator, and the 24 LED door mounted annunciator
- Communications are provided with extended diagnostics for quick setup and easy maintenance

4605 Series 24 Point I/O Package availability:

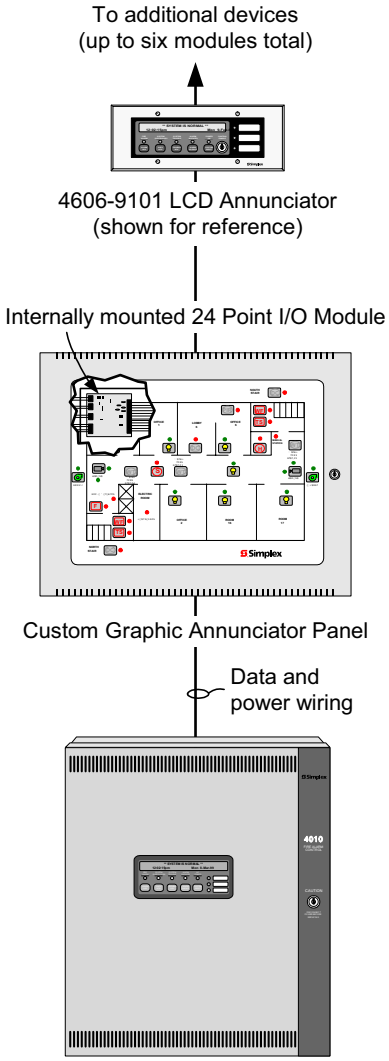
- Modular package with cabinet, with or without retainer and door, for up to six modules
- Plate mounting for up to six modules (for use with cabinet by others)
- Module only (for expansion, or for use with mounting plate and enclosure by others)

Also available as a door mounted 24 LED annunciator:

- Includes 24 Point I/O module dedicated for 24 LED annunciation, individually selectable as red or yellow
- Standard on ULC models and available as door-only assemblies for electronics only packages, or for aftermarket installation

UL listed to Standard 864

* Refer to page 2 for listing exceptions for the door mounted LED annunciator. The 4605 series 24 Point I/O module 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 7120-0026:225 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 Safety Products Westminster.



4010 Fire Alarm Control Panel

Typical Application for 24 Point I/O Module
(shown with LCD Annunciator for reference only)

General Description

The 4605 Series of I/O modules provide a flexible remote interface for graphic annunciators, HVAC monitoring and control, output bypass control, utility door monitoring, and emergency call switches. Each I/O point can be selected as an input or output as determined by local requirements.

Selectable Outputs and Inputs. Outputs can be selected to be continuously on, or pulsed at a slow or fast rate. Inputs can be selected to be unsupervised, supervised for open circuit wiring, supervised for open or short circuit wiring, or to monitor three position switches such as those used for H.O.A. (hand-off-auto) switch control.

Packaging Description

Mounting options include a module only package, module (or multiple modules) mounted on a plate suitable for installation in separately purchased cabinets, modules (up to six) mounted in a Simplex cabinet, or as door mounted 24 LED annunciators for use on the 4010 cabinet.

Annunciation Flexibility. Up to six, N2 communications modules may be connected to the 4010 N2 external annunciator communications bus. These modules may be either the 4606-9101 LCD annunciator or the 24 Point I/O module.

Product Selection, 4605 Series Graphic I/O Modules and Accessories

System Type (select one) (see Note below and refer to page 3 for reference drawing)

Model	Description	Dimensions
4605-8401	Cabinet mounted modules; six maximum; for use with Simplex cabinet; cabinet ordered separately	see below
4605-8402	Plate mounted modules; six maximum; for cabinet by others	13-1/2" H x 21-3/8" W (323 mm x 543 mm)
4605-8904	Module only	5-3/4" x 6-1/2" (146 mm x 165 mm)

Graphic Type (order quantity as required)

Model	Description	Dimensions
4605-7401	24 Point I/O Module; includes mounting hardware	5-3/4" x 6-1/2" (146 mm x 165 mm)

Cabinet Selection (select if cabinet mounted, reference 4605-8401)

Model	Description	Dimensions
4605-2401	Beige 2-Unit Cabinet; mounts up to six modules; with glass door and retainer	20-3/4" H x 25-3/4" W x 4-1/4" D (527 mm x 654 mm x 108 mm)
4605-2404	Beige 2-Unit Cabinet; mounts up to six modules; w**ithout** door and retainer (back box only)	
4605-2201	Red finish option	

Separate Backbox (select if backbox is to be pre-shipped)

Model		Description	Dimensions
2975-9184	Beige	2-Unit back box only, no door or retainer	20-3/4" H x 25-3/4" W x 4-1/4" D (527 mm x 654 mm x 108 mm)
2975-9185	Red		

Accessories (select as required)

Model		Description
2975-9801	Beige	Semi-flush trim kit
2975-9802	Red	

NOTE: If the 24-Point I/O equipment is used for a custom graphic annunciator panel, one output must be configured always-on and wired to a power-on indicator on the front panel to meet UL requirements.

Product Selection Reference, 24 LED Annunciator Doors

4010 Fire Alarm Control Panels with 24 LED Annunciator Door (see page 4 for reference drawing)

Model		Description
4010-9101C*	English	**ULC Listed 4010 Fire Alarm Control Panel** with: Beige 24 LED Annunciator door, beige cabinet, 120 VAC input power supply/battery charger, IDNet interface, 4 NACs, 2 auxiliary relays, and external N2 communications interface; refer to data sheet S4010-0001 for control panel details
4010-9101CF*	French	

24 LED Annunciator Doors for Aftermarket Add-On to Existing Panels (ordered separately)

Model	Description	Dimensions
4010-9860** 4010-9860CAF**	Beige Door with 24 LED Annunciator and dress panel; CAF suffix selects French	22" H x 18" W x 1-23/32"D (559 mm x 457 mm x 44 mm)
4010-9861**	Red Door with 24 LED Annunciator and dress panel	

* These products are ULC listed only as of document revision date.

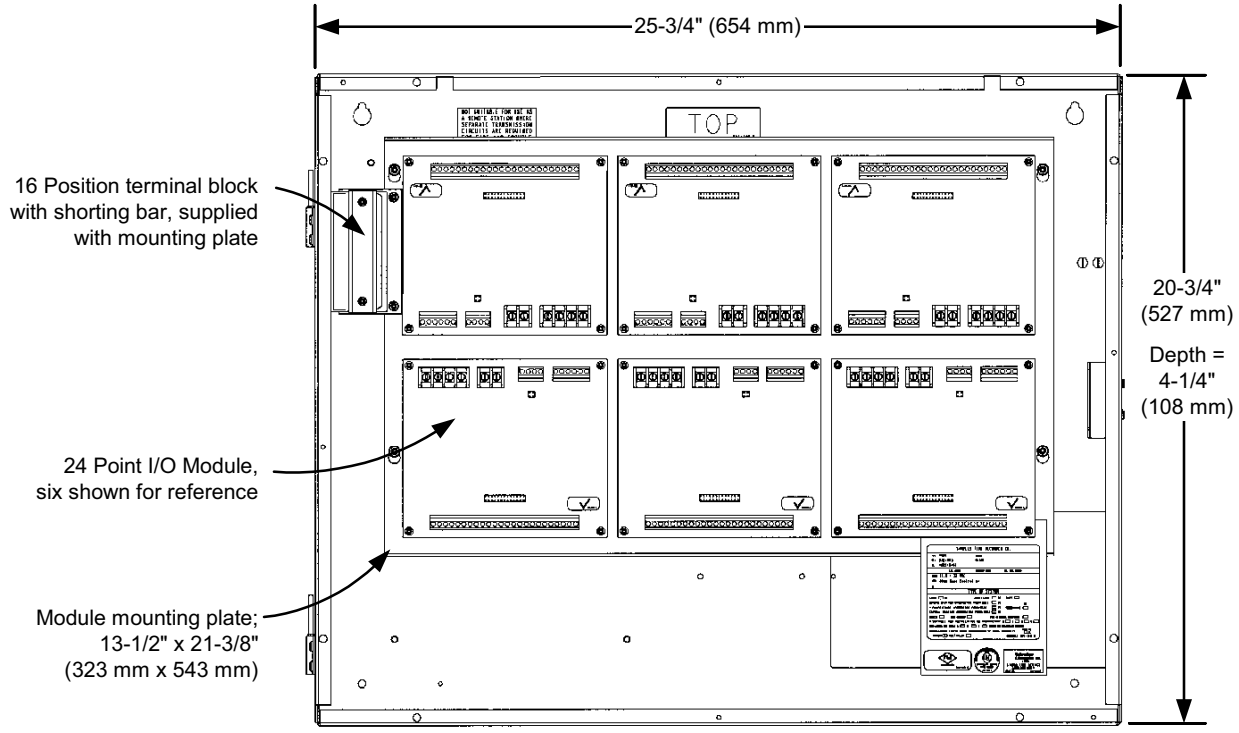
** As of document revision date, 4010-9860 and 4010-9861 are UL, ULC, and CSFM listed, and FM approved only (see CSFM listing 7170-0026:226); 4010-9860CAF is ULC listed and FM approved only.

Specifications

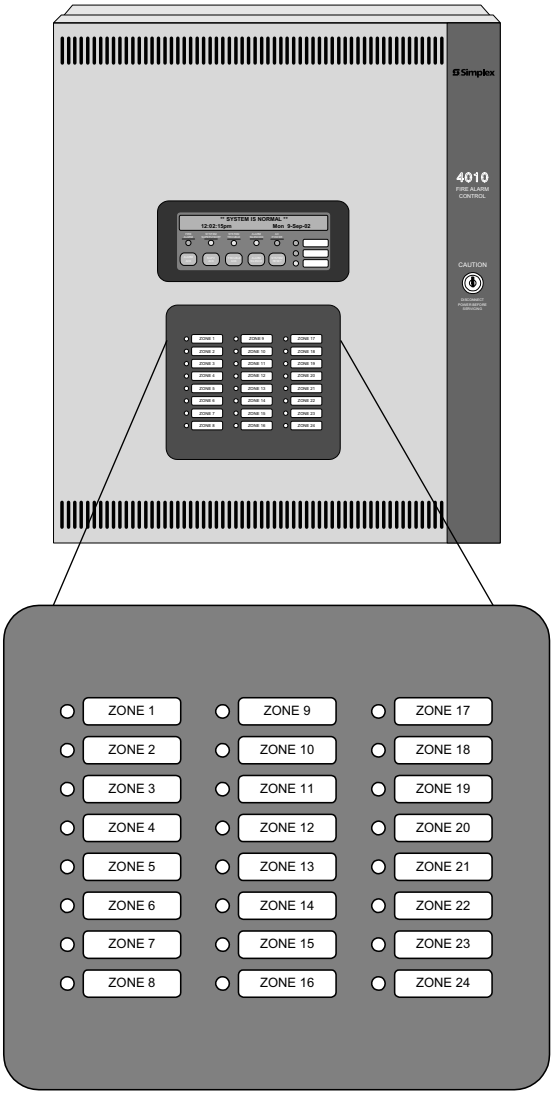
Input Voltage and Switch Voltage Rating		18 to 32 VDC, system supplied		
Communications		N2 external annunciator communications line from 4010 Fire Alarm Control Panel		
Wiring Connections		Terminal blocks for wire size 18 to 14 AWG (0.82 mm^2 to 20.8 mm^2)		
Module Operating Current*		60 mA @ 24 VDC		
Output Rating*		75 mA @ 32 VDC maximum, per output (1.8 A total maximum)		
Switch Current Draw @ 24 VDC, per Switch*	Unsupervised	7.3 mA when closed, no current draw when open		
	Supervised for open	Supervisory state	N.O. = 3.7 mA,	N.C. = 7.3 mA
		Switch activated	N.O. = 7.3 mA,	N.C. = 3.7 mA
	Supervised for open and short	Supervisory state	N.O. = 3.2 mA,	N.C. = 5.6 mA
		Switch activated	N.O. = 5.6 mA,	N.C. = 3.2 mA
	H.O.A.	"Hand" position = 7.3 mA "Off" position = 5.9 mA "Auto" position = 3.7 mA		
24 LED Annunciator Door		Supervisory = 60 mA Alarm = 83 mA with all LEDs on		
Temperature Range		32° to 120° F (0° to 49° C)		
Humidity Range		10% to 90% RH, non-condensing, at 90° F (32° C)		
Additional Reference		Refer to Installation Instructions 574-348 and Field Wiring Diagram 842-063		

* For total current, add outputs and supervisory current to module current.

Two-Unit Mounting Cabinet Reference Drawing



24 LED Annunciator Door Reference



Label inserts are provided as blank and with preprinted Zones 1 through 24 as shown