Simplex

UL, ULC, CSFM Listed;
*FM, NYC Fire Dept Approved**

4007ES Fire Control Panels

Fire Detection and Control with Addressable Initiation and Addressable Notification

Features

Flexible standard combination of addressable initiation and *addressable notification*

4.3" (109 mm) Diagonal *color touchscreen* display:

- Convenient and intuitive user interface provides detailed system status and individual point information
- *Supports dual language selection*, including unicode character languages
- A custom background display appears when operation is normal (see page 7 for details)

Includes a 3 A IDNAC SLC (signaling line circuit) output power supply that provides *enhanced power delivery* to *addressable* notification appliances:

- A ***constant*** 29 VDC source voltage is maintained during alarm, even during battery operation, allowing strobes to operate at higher voltage with lower current and ensuring a consistent current draw and voltage drop margin under both primary power and secondary battery standby
- Efficiencies include lower strobe currents, wiring distances up to 2 to 3 times farther than with conventional notification, support for more appliances per IDNAC SLC, and smaller gauge wiring. This provides installation and maintenance savings. with high assurance that appliances will operate as normal during worst case alarm conditions
- IDNAC SLCs are compatible with both TrueAlert ES and TrueAlert addressable notification appliances, and remote 4009 IDNAC Repeaters to extend power and wiring distance even farther and provide for up to 127 addressable notification appliances
- Power supply provides battery backup charging of up to 33 Ah; up to 18 Ah for cabinet mounted batteries and up to 33 Ah batteries for mounting in close-nippled remote battery cabinet

Electrically isolated IDNet+ addressable initiating device SLC:

- Provides built-in short circuit isolation for monitoring and control of TrueAlarm analog sensors and IDNet communications monitoring and control devices; for use with either shielded or unshielded, twisted or untwisted single pair wiring; outputs are Class A or Class B
- Standard panel SLC provides up to 100 addressable points; optional additional loop expansion modules provide an additional isolated loop with short circuit isolation for the IDNet+ channel; each loop expansion module also provides an additional 75 addressable points to the IDNet+ channel capacity for a total of up to 250 addressable points

Software Feature Summary:

- Current and previous panel configuration are both maintained in on-board memory to allow easy selection of desired revision
- An internal Ethernet service port is available for service computer connections to perform configuration updates, downloads and uploads; report downloads, and system software updates
- Internal USB interface allows a memory stick/thumb drive to store job revisions, update revised jobs and panel software, and save detailed system reports from the panel



4007ES Panel Front View

Optional modules and connections include:

- Fire Alarm Network Interface for Peer-to-Peer fire alarm network communications, supports either Class B or Class X operation
- Point or Event DACT assembly that is compatible with IP Communicators
- Up to two additional IDNet+ addressable device output loop connections with 75 additional point capacity each
- Front mounted 48 LED annunciator with custom label inserts.
- Dual Class A IDNAC Isolator (DCAI)
- Remote LED annunciator support via RUI (remote unit interface) communications port for use with unshielded, twisted pair wiring (UTP)
- Eight Point Zone/Relay Modules individually selectable as IDC or relay rated 2 A @ 30 VDC (resistive)
- Alarm relays and auxiliary relays
- Dual RS-232 ports (for printer, PC annunciator or third party interface)
- TrueInsight Remote Gateway
- City connections, with or without disconnect switch
- 4003EC Voice Control Panels
- 4009 Series IDNAC Repeaters
- Battery brackets for seismic area protection (see page 2)

General Mechanical:

- Compact red or platinum cabinet for convenient surface or semi-flush mounting; rated NEMA 1 and IP30

4007ES Listings reference:

- UL 864 - Control Units, System (UOJZ); Control Unit Accessories, System, Fire Alarm (UOXX); ; Control Units, Releasing Device Service (SYZV)
- UL 2017 - Emergency Alarm System Control Units (CO detection), (FSZI)
- ULC-S559 - Central Station Fire Alarm System Units (DAYRC)
- ULC-S527 - Control Units, System, Fire Alarm (UOJZC); Control Unit Accessories, System, Fire Alarm (UOXXC); Control Units, Releasing Device Service (SYZVC)

* 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 7165-0026:0378 for allowable values and/or conditions concerning material presented in this document. NYC Fire Dept COA #6151. 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.

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Introduction

4007ES Series Fire Detection and Control Panels provide extensive installation, operator, and service features with point and module capacities suitable for a wide range of system applications. Panels can be configured for stand-alone or networked fire control operation. The convenient and intuitive color touchscreen provides easy access for typical system response actions and for detailed system review or configuration updates with password control to limit user access.

IDNet+ addressable initiation communications and IDNAC addressable notification communications are standard features. (Refer to data sheet S4007-0001 for 4007ES panels providing conventional notification.)

Operator Interface

Convenient Status Information. With the locking door closed, the glass window allows viewing of the display status LEDs. The user interface is a 4.3" diagonal color touchscreen LCD with separate status LEDs as shown below.

LED indicators describe the general category of activity being displayed with the LCD providing more detail. For the authorized user, unlocking the door provides access to the control functions and allows further inquiry by scrolling the display for additional detail.

Operator Interface and Software Features

- Convenient and detailed operator information is easily accessed using a logical, menu-driven touchscreen display with password access control
- Multiple automatic and manual diagnostics for maintenance reduction

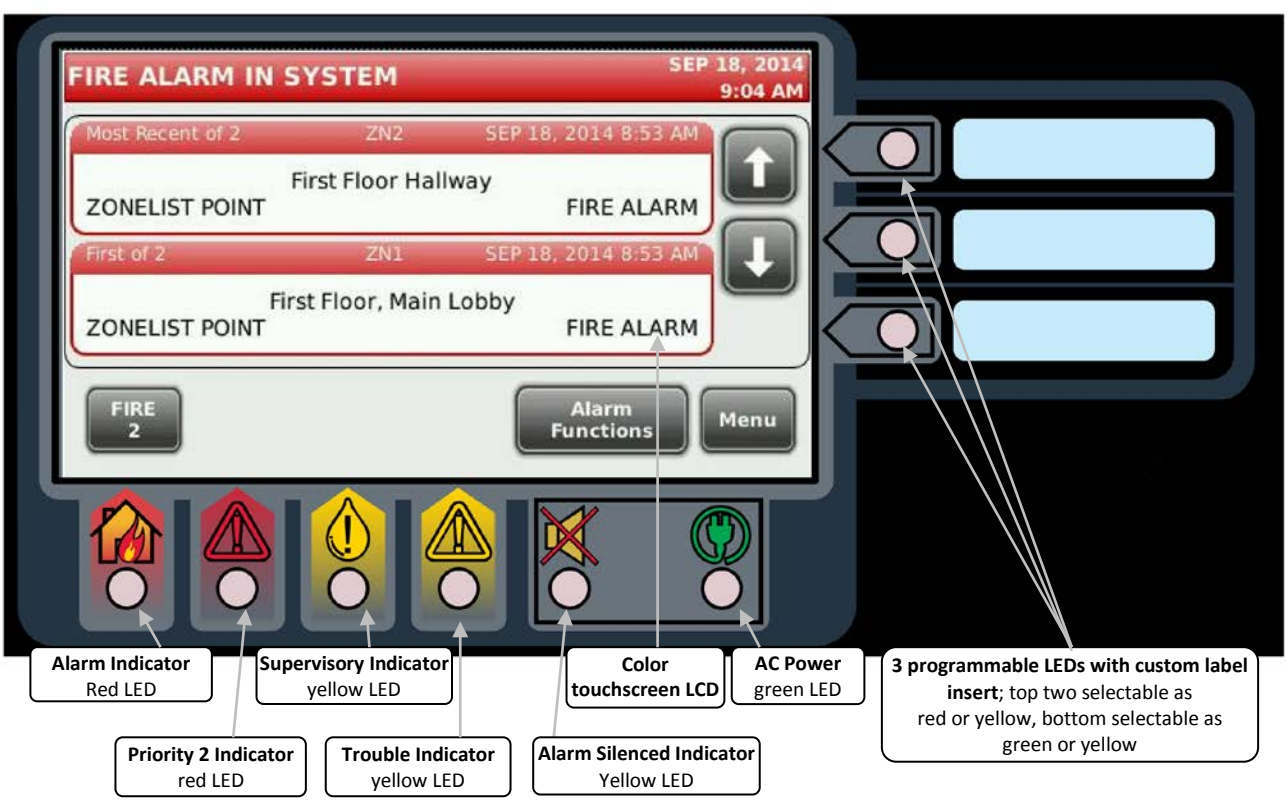
Operator Interface Features *(Continued)*

- Alarm and Trouble History Logs (up to 1000 entries for each, 2000 total events) are available for viewing from the display or for printing to a connected printer, or downloaded to a service computer
- Module level ground fault searching assists installation and service by locating and isolating modules with grounded wiring
- WALKTEST silent or audible system test performs an automatic self-resetting test cycle and supports up to 8 WALKTEST groups
- **Install Mode** allows grouping of multiple troubles for uninstalled modules and devices into a single trouble condition (typical with future phased expansion); with future equipment and devices grouped into a single trouble, operators can more clearly identify events from the commissioned and occupied areas

Mechanical Description

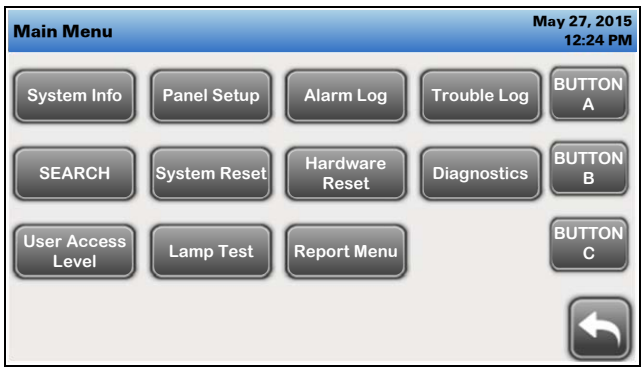
- Locking door with polycarbonate window
- Latching front panel assembly swings forward for convenient internal access
- Smooth box surfaces are provided for locally cutting conduit entrance holes exactly where required
- Modules are power-limited (except as noted, such as relay modules)
- Battery compartment (bottom) accepts two batteries, up to 18 Ah, to be mounted within the cabinet without interfering with module space; charger capacity is up to 33 Ah; for batteries greater than 18 Ah, refer to page 7 for external battery cabinet details
- Cabinet assembly design has been seismic tested and is certified to IBC and CBC standards as well as to ASCE 7 categories A through F, requires battery brackets as detailed on data sheet S2081-0019

Touchscreen Display with LED Status Indicators (approximately full size)



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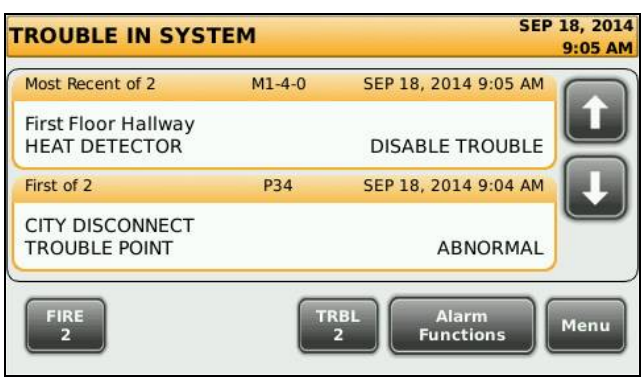
Main Menu Screen provides easy navigation to the function required. Buttons A, B, and C have programmable functions.



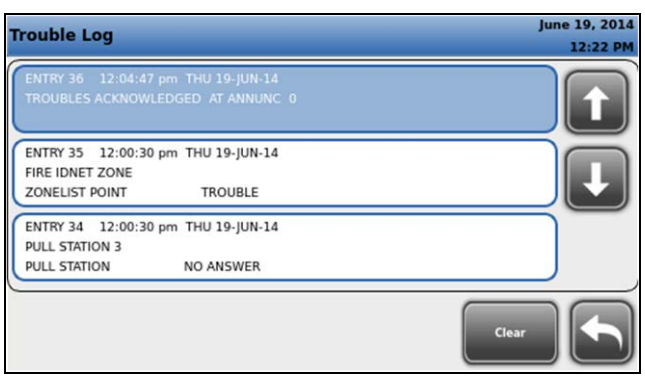
System Alarm Screen identifies active alarms with custom labels displayed, arrows allow navigation through the list



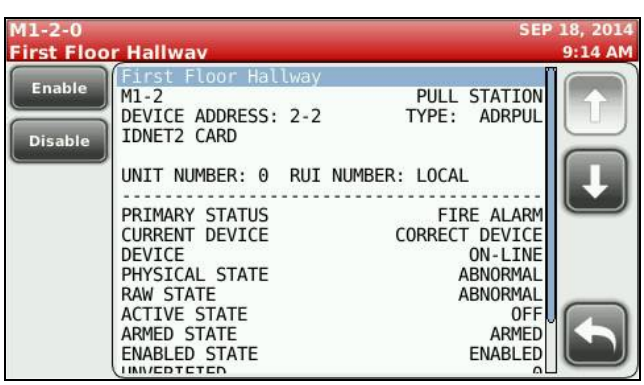
System Trouble Screen identifies active troubles with custom labels displayed, arrows allow navigation through the list



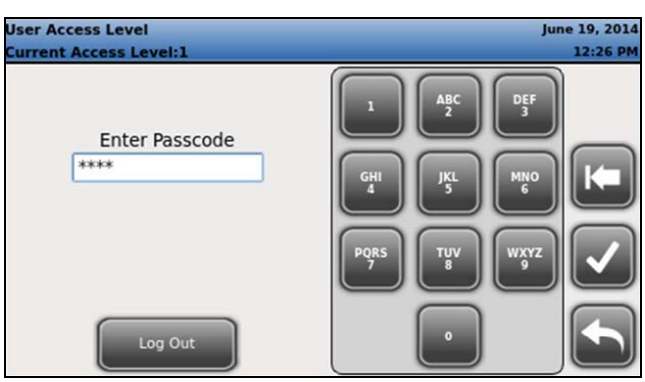
Trouble Log Screen allows review of past troubles with time stamp and point details shown.



Point Information Screen allows review of point details, arrows allow navigation through the information.



User Access Login Screen controls access to panel operations as determined per panel.



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IDNet+ Addressable Device Control

Overview. The 4007ES provides an IDNet+ addressable initiating device Signaling Line Circuit (SLC) that supervises wiring connections and the individual device communications status on the SLC. With 2-wire IDNet+ SLCs, initiation, monitoring, and control devices such as manual fire alarm stations, TrueAlarm sensors, control relays, and sprinkler waterflow switches can communicate their identity and status and receive fire alarm system control. Additional addressable interface modules include circuit isolators, conventional IDC zone adapters, and interface to other system circuits such as fans, dampers, and elevator controls.

IDNet+ Addressable Device Operation

Each addressable device on the IDNet+ communication channel is continuously interrogated for status condition such as: normal, off-normal, alarm, supervisory, or trouble. Both Class B and Class A operation is available. Sophisticated poll and response communication techniques ensure supervision integrity and allow for "T-tapping" of the circuits for Class B operation. Devices with LEDs pulse the LED to indicate receipt of a communications poll and can be turned on steady from the panel. With addressable devices, the location and status of the connected device is monitored, logged, and displayed on the operator interface LCD with each device having its own 40 character custom label for precise identification.

TrueAlarm Addressable Sensor Operation

Addressable initiating device communications include operation of TrueAlarm smoke and temperature sensors. Smoke sensors transmit an output value based on their smoke chamber condition and the CPU maintains a current value, peak value, and an average value for each sensor. Status is determined by comparing the current sensor value to its average value. Tracking this average value as a continuously shifting reference point filters out environmental factors that cause shifts in sensitivity.

TrueAlarm Addressable Sensor Reference



TrueAlarm Photo Sensor with Base



TrueAlarm Photo/Heat Sensor in CO Base

Programmable sensitivity of each sensor can be selected at the control panel for different levels of smoke obscuration (shown directly in percent) or for specific heat detection levels. To evaluate whether the sensitivity should be revised, the peak value is stored in memory and can be easily read (or downloaded as a report) and compared to the alarm threshold directly in percent.

CO sensor bases combine an electrolytic CO sensing module with a TrueAlarm analog sensor to provide a single multiple sensing assembly using one system address. The CO sensor can be enabled/disabled, and can be used in LED/Switch modes and custom control. (refer to data sheet S4098-0052 for details)

TrueAlarm heat sensors can be selected for fixed temperature detection, with or without rate-of-rise detection. Utility temperature sensing is also available, typically to provide freeze warnings or alert to HVAC system problems. Readings can selected as either Fahrenheit or Celsius.

TrueSense Early Fire Detection. Multi-sensor 4098-9754 provides photoelectric and heat sensor data using a single 40070ES IDNet+ address. The panel evaluates smoke activity, heat activity, ***and their combination***, to provide TrueSense early detection. For more details on this operation, refer to data sheet S4098-0024.

Diagnostics and Default Device Type

Sensor Status. TrueAlarm operation allows the control panel to automatically indicate when a sensor is almost dirty, dirty, and excessively dirty. The NFPA 72 requirement for a test of the sensitivity range of the sensors is fulfilled by the ability of TrueAlarm operation to maintain the sensitivity level of each sensor. CO Sensors track their 10 year active life status providing indicators to assist with service planning. Indicators occur at: 1 year, 6 months, and end of life.

Modular TrueAlarm sensors use the same base and different sensor types (smoke or heat sensor) and can be easily interchanged to meet specific location requirements. This allows intentional sensor substitution during building construction when conditions are temporarily dusty. Instead of covering smoke sensors (causing them to be disabled), heat sensors may be installed without reprogramming the control panel. The control panel will indicate an incorrect sensor type, but the heat sensor will operate at a default sensitivity to provide heat detection for building protection at that location.

IDNet+ Device Wiring Reference

IDNet+ Addressable Channel Capacity. The 4007ES provides an isolated output IDNet+ signaling line circuit (SLC) that supports up to 250 addressable monitor and control points intermixed on the same pair of wires. (250 total requires two 4007-9803 IDNet+ Loop Expansion Modules.)

IDNet+ SLC Wiring Specifications

Maximum Distance from Control Panel per Device Load	0 to 125	4000 ft (1219 m); 50 ohms
	126-250	2500 feet (762 m); 35 ohms
Total Wire Length Allowed With "T" Taps for Class B Wiring		Up to 12,500 ft (3.8 km); 0.60 µF
Maximum Capacitance Between IDNet+ Channels		1 µF
Loading per device		0.8 mA supv., 1 mA alarm; 2 mA per activated device LED
Wire Type and Connections		Shielded or unshielded, twisted or untwisted wire*
Connections		Terminal blocks for 18 to 12 AWG
Compatibility includes: IDNet communicating devices and TrueAlarm sensors *including* QuickConnect and QuickConnect2 sensors; see data sheet S4090-0011 for additional reference		

* Some applications may require shielded wiring. Review your system with your local Simplex product supplier.

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IDNAC SLC Control of TrueAlert and TrueAlert ES Addressable Notification

Addressable notification appliance communications include operation of TrueAlert and TrueAlert ES Visible only (V/O, strobe), Audible only (A/O, horn), Audible/Visible (A/V, horn/strobe), and strobes of Speaker/Visible (S/V) notification appliances. (S/V appliances require separate speaker wiring.) IDNAC SLC addressable communications allow each horn and strobe to be individually controlled using a single two-wire circuit, confirms the wiring connections to the individual notification appliance's electronic circuit, and confirms communications between each appliance and the fire alarm control panel. Addressable communications increases supervision integrity versus conventional notification systems by providing supervision beyond the circuit wiring to each individual appliance and by constantly verifying the ability of each appliance to communicate with the control panel.

Individual Appliance Status and Settings. The fire alarm control panel monitors and records each addressable notification appliance status, type of appliance, and its configured appliance settings. A fault in any individual appliance automatically reports a trouble condition to the control panel.

TrueAlert ES Addressable Appliance Reference



A/O (horn)



V/O (strobe)



A/V (horn/strobe)

Virtual NACs Provide Control Convenience. For control convenience, IDNAC notification appliances can be grouped into ***Virtual NACS*** (VNACs) for group control.

Panel Control Convenience. Applicable operation settings for each appliance can be programmed *without having to replace appliances or remove them from the wall or ceiling*. An appliance's VNAC notification zone can be easily changed through programming without having to add additional circuits, conduit, and wiring. Audible and visible appliances for non-Fire Emergency Communications notification can be programmed to operate separately *on the same pair of wires as the fire alarm notification appliances*. The result is lower installation, retrofit, and overall life-cycle cost of ownership compared with traditional conventional notification systems.

Installation, Retrofit, and Life-Cycle Cost Benefits. With each addressable appliance capable of being controlled separately on the same two-wire IDNAC SLC, installation time and expense for both retrofit and new construction can be significantly reduced. When Class B wiring is used, wiring can be "T-tapped" allowing more savings in distance, wire, conduit (size and utilization), and overall installation efficiency.

Location Information, Diagnostics and Troubleshooting. Each addressable notification appliance has its own 40 character custom label to identify the location of the appliance and to aid in troubleshooting fault conditions. In conventional notification systems, conventional appliances are not capable of communicating with the control panel. Fault reporting on a conventional system is limited to the circuit wiring and the entire area (zone) covered by appliances on the notification appliance circuit (NAC) making it much more difficult and costly to locate and correct the source of a problem. Using the TrueAlert magnet test allows each appliance to individually identify its candela setting and address and to briefly operate if desired, and using the ***TrueAlert ES Appliance Self-Test feature provides detailed performance verification per appliance.***

TrueAlert ES Appliance Self-Test Operation

On-Board Test Sensors. TrueAlert ES appliances are equipped with on-board sensors to detect strobe and/or horn output allowing efficient and unobtrusive Self-Testing. When **Automatic Self-Test** is initiated from the control panel, each appliance within the selected VNAC group will briefly operate and then report its Self-Test status to the control panel, all within several seconds. Silent Self-Test can be selected to test only visible appliance if desired. The control panel is in a trouble condition during testing and in the event of an alarm, Self-Test is automatically terminated.

Automatic Self-Test results are communicated to the control panel with a time and date stamp and are stored in memory. Results are viewable at the front panel display and printed reports are available from the panel USB port. (See sample reports on page 10.)

Individual Self-Test is selected from the control panel when individual appliances need to be observed to operate. Each appliance in the selected VNAC group will turn on its LED until individually activated by applying a magnet. After performing the individual test, the appliance LED turns off to indicate completion. Results are recorded the same as during the automatic test.

IDNAC SLC Hardware Reference

The 4007ES provides a 3 A IDNAC SLC for control and power to TrueAlert ES and TrueAlert addressable notification appliances. The power supply incorporates an efficient switching design that provides a regulated output of 29 VDC, even during battery operation. With 29 VDC minimum output at the panel, addressable notification SLCs can support wiring distances 2 to 3 times farther than available with conventional notification, or support more appliances per SLC, or work with smaller gauge wiring, or combinations of these benefits. The result is installation and maintenance savings with high assurance that appliances that operate during normal system testing will operate during worst case alarm conditions.

IDNAC SLC Appliance Wiring Reference

Recommended wire type	UTP, unshielded twisted pair
IDNAC SLC Capacity	Up to 127 addresses and up to 139 unit loads (appliances are typically one unit load, devices such as Isolators may require more than one load, refer to individual device data sheet for specific information)
Maximum wire length allowed with "T-Taps" for Class B wiring, per SLC	10,000 ft (3048 m)
Maximum wire length per SLC to any appliance	4000 ft (1219 m)
Appliance Supervisory Current	1 unit load = 0.8 mA per appliance
Wiring connections	Terminal blocks for 18 to 12 AWG

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Power Supply Output and Zone/Relay Module Details

Power Supply Output Details:

- **RUI Communications** controls up to 10 remote devices at up to 2500 ft (762 m) for single run, or 10,000 ft (3048 m) total if wiring is Class B and T-tapped; output is selectable as Class B or Class A
- **Compatible RUI remote equipment** includes: 4606-9202 and 4606-9205 Color Touchscreen Annunciators (up to 6 total), 4100 Series 24 I/O and LED/Switch modules, 4602 Series LED/Switch and I/O Annunciator modules, including 4602-9101 Status Command Units (SCU), and 4602-9102 Remote Command Units (RCU)
- **IDNet+ SLC Output** provides electrically isolated Class B or Class A communication; standard capacity is up to 100 addressable points with expansion for up to 250 points using up to two 4007-9803 IDNet+ Loop Expansion Modules (as described on page 4)
- **Battery Charger** is dual rate, temperature compensated, and charges up to 18 Ah sealed lead-acid batteries in the battery compartment, and charges up to 33 Ah batteries in an external cabinet

Power Supply Output Details *(Continued)*:

- **Battery and Charger Monitoring** includes battery charger status and low or depleted battery conditions; status information provided to the master controller includes analog values for: battery voltage, charger voltage and current, actual system voltage and current, and IDNAC SLC current
- **Low Battery Voltage Cutout** is selectable when required (required for ULC listing applications)
- **4 A Output Rating.** This includes current for: IDNAC controlled notification appliances; IDNet devices; module currents; and auxiliary output current (battery charging, CPU, and power supply current are not subtracted from the 4 A)
- **2 A Auxiliary Output (AUX/SNAC)** can be selected either as resettable auxiliary power of 2 A @ 24 VDC, or selected to be a simple NAC (SNAC) for sounder base power, 4-wire detector power, or door holder power

Product Selection

Model*	Color	Description	Supv.	Alarm
4007-9201(BA)	Red	4007ES with a 3 A, Class B, IDNAC SLC for up to 127 addressable notification appliances, and 4 A output power supply/battery charger; includes IDNet+ communications for 100 addressable points Note: Add optional module and other currents separately for battery calculations; base panel current does not subtract from the 4 A power available for optional modules and external loads	180 mA	185 mA
4007-9202(BA)	Platinum			

* Models with (BA) are available assembled in the USA by adding the suffix "BA".

Module and Accessories Selection Information

	Model	Description
Factory Programming Options	4007-8810	Factory Programming (select)
	4007-0831	Custom Labels and Programming (requires 4007-8810)

Field Installed Optional Modules (refer to diagram on page 8 for module locations)

Model	Description		Supv.	Alarm
4007-9801	**Eight Point Zone/Relay Module**; each point is selectable as an IDC input or Relay output, Class A IDCs require 2 points (one out and one return); select up to 4 maximum; current shown is for 8 Class B IDCs with 4 in alarm, *detector current is added separately* (refer to 4007ES Hybrid data sheet S4007-0001 for additional information)		83 mA max	350 mA max
4007-9802	**25 VDC Regulator Module**; 2 A maximum output; use to power Zone/Relay modules connected to initiating devices requiring nominal 25 VDC voltage; refer to technical publication 579-832, *2-Wire Detector Compatibility Chart* for application details	with 1 module	190 mA	445 mA
		with 2 modules	290 mA	801 mA
		with 3 modules	390 mA	1156 mA
4007-9803	**IDNet+ Loop Expansion Module**; provides an additional isolated loop with short circuit isolation to the existing IDNet+ channel, also provides an additional 75 addressable points to the IDNet+ channel capacity, maximum of two		NA	NA
4007-9804	**Dual Class A IDNAC Isolator (DCAI)**; converts a single Class B IDNAC SLC input to two Class A or two Class B SLC outputs; provides short circuit isolation between each Class A or B output circuit; requires one IDNAC address; the total current remains controlled by the Class B input source SLC at 3 A maximum		8.3 mA	18.5 mA
4007-9805	**Panel Mounted 48 LED Status Annunciator Module**; provides 24 Yellow LEDs, 20 Red LEDs, and 4 Red/Green LEDs that are programmable for up to 24 IDC zones of alarm and trouble annunciation, or as required for custom annunciation requirements	no LEDs on	10 mA	10 mA
		with LEDs on	1.75 mA per LED, 105 mA max	
4007-9806	**SDACT Module** for Point or Event Reporting; order 2080-9047 connection cables as required (see cable details under accessories).		30 mA	40 mA
4007-9807	**City Circuit Module** with Disconnect Switch		20 mA	36 mA
4007-9808	**City Circuit Module** without Disconnect Switch		20 mA	36 mA
4007-9809	**Relay Module;** relays for Alarm, Supervisory, and Trouble; rated 2 A resistive @ 32 VDC		15 mA	37 mA
4007-9812	**Dual RS-232 Interface Module**, compatible with Simplex remote printer, PC annunciator or third party interface (two ports/connections maximum).		60 mA	60 mA

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Module and Accessories Selection Information *(Continued)*

Field Installed Optional Modules

Model	Description		Supv.	Alarm
4190-8001*	**TrueInsight Remote Service Gateway Module and Programming Selection**	Required Selection	62 mA	73 mA
4190-6106 *	**TrueInsight Remote Service Gateway Module Installation Kit**; includes module and harness; configured for dynamic IP address operation unless ordered with 4190-4016			
4190-4016 *	**TrueInsight Remote Service Gateway Module for fixed IP Addressing**; optional, select if application will use fixed IP address			
4007-9810	**Network Interface Card**; Modular Network Interface; requires two media modules (below).		30 mA	30 mA
4007-9813	**Wired Media Module**	Select media cards as required; mounts to 4007-9810 NIC; Class B or Class X operation	55 mA	55 mA
4007-9814	**Fiber Optic Media Module**		25 mA	25 mA

* Refer to data sheet S4100-0063 for additional TrueInsight Service Gateway details

Batteries

Model	Capacity	Battery Mounting Details	
2081-9272	6.2 Ah	12 V Batteries for cabinet mounting; select one battery model per system standby requirements; order quantity of two; to be wired in series for 24 VDC	
2081-9274	10 Ah		
2081-9288	12.7 Ah		
2081-9275	18 Ah		
2081-9287	25 Ah	For remote mount in Battery Box 4009-9801	Batteries for remote mounting; see battery cabinet details below
2081-9271	33 Ah	For remote mount in Battery Box 4009-9802	

Battery Accessories

Model	Color	Capacity	Dimensions	Description
4009-9801	Beige	For up to 25 Ah batteries	16 ¼" W x 13 ½" H x 5 ¾" D (413 mm x 343 mm x 146 mm)	External battery cabinet **without** charger, with locking solid door and battery harness; for close-nippled mounting to fire alarm control panel cabinet
4009-9802	Beige	For up to 33 Ah batteries	25 ¾" W x 20 ¾" H x 4 ⅛" D (654 mm x 527 mm x 105 mm)	

Accessories

Model	Description
2080-9047	DACT cable, 14 ft (4.3 m) long, RJ45 plug one end, spade lugs on the other; order one per phone line connection required
2975-9812	Red semi-flush box trim; 1 $^{7}/_{16}$" (37 mm) wide, four corners and trim pieces for top, bottom, and sides
2975-9813	Platinum semi-flush box trim; 1 $^{7}/_{16}$" (37 mm) wide, four corners and trim pieces for top, bottom, and sides
4081-9018	10 kΩ, 1 W end-of-line resistor harness for non-addressable NACs (if 4007-9801 is used)
2081-9031	Series resistor for WSO, non-addressable IDCs (N.O. water flow and tamper on same circuit, wires after water flow and before tamper) 470 Ω, 1 W, encapsulated, two 18 AWG leads (0.82 mm^2), 2 ½" L x 1 ⅜" W x 1" H (64 mm x 35 mm x 25 mm)

General Specifications

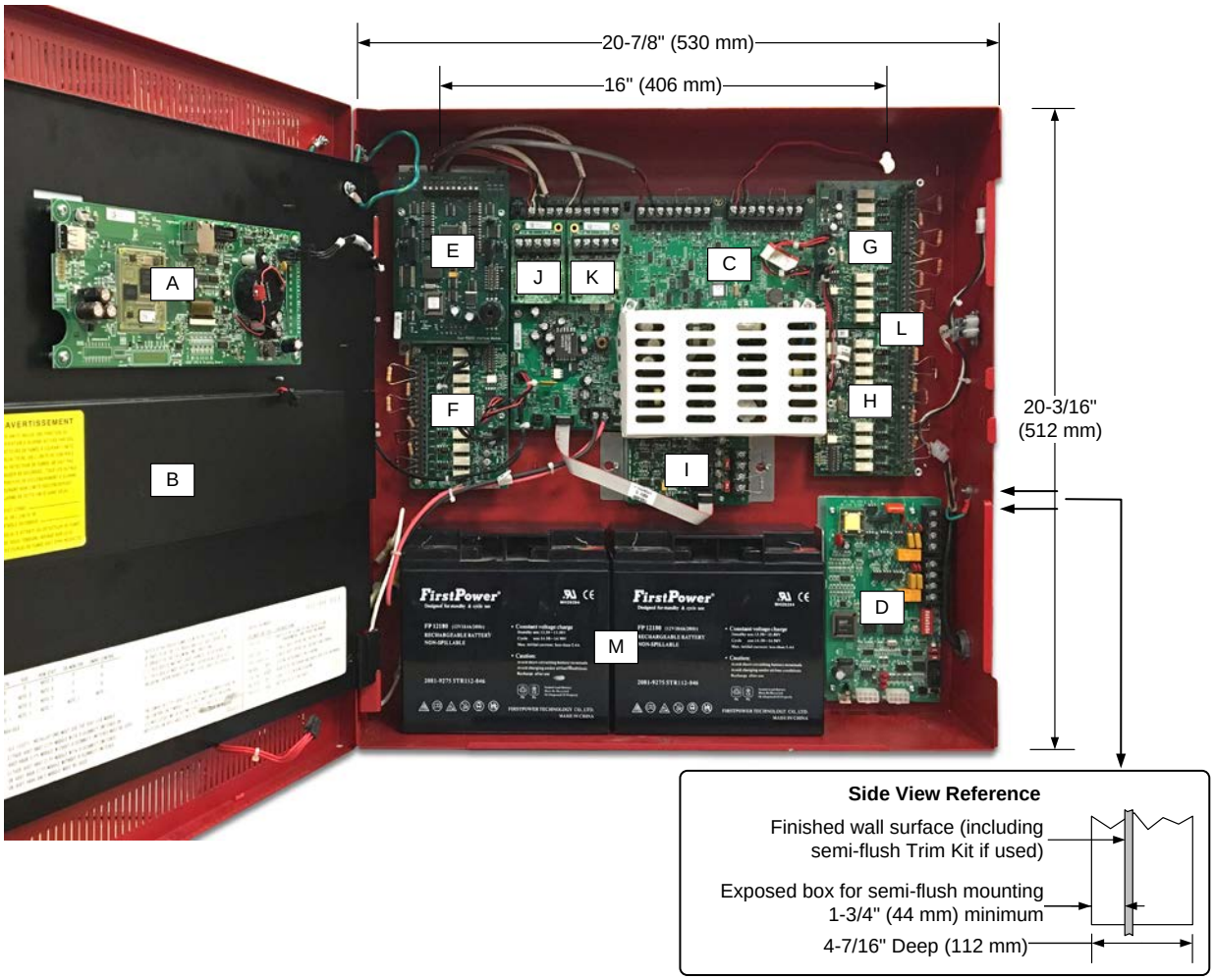
Input Power	120 VAC Input	2 A maximum @ 102 to 132 VAC, 50/60 Hz	
	240 VAC Input	1 A maximum @ 204 to 264 VAC, 50/60 Hz	
	Battery	6 A maximum @ 24 VDC (during battery operation)	
4007ES Power Supply Output Ratings	Power Supply Output Rating	4 A output for "Special Application" appliances Note: The 4 A output rating was determined such that optional module currents, and external device and appliance currents can be directly added together, not to exceed 4 A total.	Output switches to battery backup during mains AC failure or brownout conditions
	IDNAC SLC Ratings	3 A, regulated 29 VDC during Alarm, 127 addresses, 139 unit loads; DC-DC converter circuit is >92% efficient over operating range	
	IDNAC SLC Wiring	Output terminals are rated for 18 to 12 AWG with duplicate output terminals rated for two wires each, allowing up to four (4) Class B branch circuit T-taps to be made in the cabinet; additional T-taps may be made in external wiring junction cabinets or boxes	
	Auxiliary Power Tap	2 A maximum, 24 VDC nominal (19.5 to 31.1 VDC)	
Compatible Special Application Appliances		Simplex TrueAlert ES and TrueAlert addressable notification appliances; contact your Simplex product representative for compatible appliances	
Battery Charger Ratings (sealed lead-acid batteries)	Battery capacity range	UL and ULC listed for battery charging of 6.2 Ah up to 33 Ah (batteries larger than 18 Ah require a remote battery cabinet)	
	Charger characteristics and performance	Temperature compensated, dual rate, recharges depleted batteries within 48 hours per UL Standard 864; to 70% capacity in 12 hours per ULC Standard S527	
Custom Background Display Details		Supported file types: JPG, BMP, GIF, and PNG Recommended image type is JPG, recommended image size is 480 x 240, and the file size limit is 100 kb	
Environmental	Operating Temperature	32° to 120°F (0° to 49° C)	
	Operating Humidity	Up to 93% RH, non-condensing @ 90° F (32° C) maximum	

Additional Technical Reference

Description	Document	Description	Document
Installation Manual	579-1102	Single Page Operator Instructions	579-1109
Zone/Relay Module Installation Manual	579-1103	4007ES Hybrid Data Sheet	S4007-0001
Detailed Operator's Manual	579-1165		

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4007ES Mounting and Module Location Reference



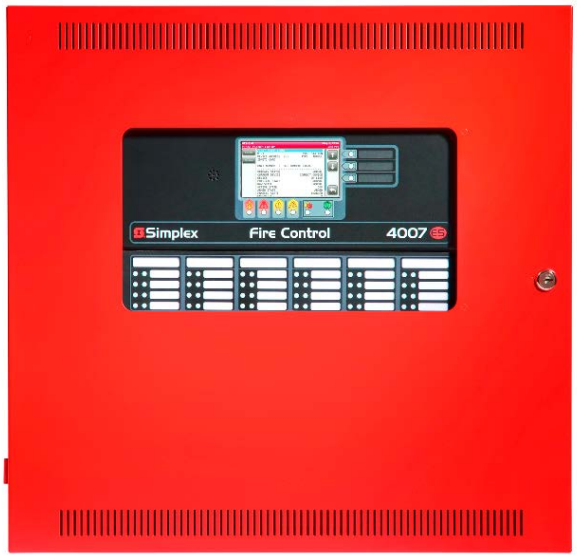
Module Locations:

A. CPU and User Interface assembly.
B. Location for optional 4007-9805 LED Module.
C. Power Supply Assembly.
D. 4007-9806 SDACT location. **Note:** The SDACT includes a 650-1838 flat mounting bracket (available separately). Some pre-existing systems with an angled SDACT bracket will need to be replaced with the flat mounting bracket when a Network Interface Card is installed.
E. Location for 4007-9801 Zone/Relay Module, 4007-9812 Dual RS-232 Interface, or (as shown) 4007-9802 25 V Regulator Module
F. Primary location for 4007-9801 Zone/Relay Module, or 4190-6106 TrueInsight Remote Service Gateway.
G. Location for additional 4007-9801 Zone/Relay Module.
H. Identical to Block G above.
I. 4007-9807 or 4007-9808 City Circuit Module, or 4007-9809 Relay Module.
J. 4007-9803 IDNet+ Loop Expansion Modules, maximum of two (two are shown).
K. Identical to block J above.
L. Block L is an additional block that sits on spacers above Block G and H. The 4007-9810 NIC can be mounted in block L with or without modules mounted below it in blocks G and H. When fiber media cards are used and an SDACT is present, the SDACT requires a 650-1838 flat mounting bracket (ordered separately).
M. Battery location for up to 18 Ah batteries. Note: No conduit entry or wiring in this area, 14-7/8” (378 mm) wide.

Note: A system ground must be provided for Earth Detection and transient protection devices. This connection shall be made to an approved, dedicated Earth connection per NFPA 70, Article 250, and NFPA 780.

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4007ES Additional Reference



4007ES with IDNAC Notification **and optional 48 LED Annunciator Module (4007-9805)**



4606-9205 (Platinum) Color LCD Touchscreen Remote Annunciator



4606-9202 (Red) Color LCD Touchscreen Remote Annunciator



4007ES with IDNAC Notification **Operator View with door open**

Additional Compatible Equipment and Reference

Subject	Data Sheet	Subject	Data Sheet
4009 IDNet NAC Extender	S4009-0002	Battery and Battery Cabinet Reference	S2081-0006
4003EC Voice Control Panel	S4003-0002	Seismic Battery Brackets Reference	S2081-0019
4606 Series Color LCD Touchscreen Remote Annunciator	S4606-0003	Addressable Device Compatibility, IDNet Communication Sensors and Devices	S4090-0011
Graphic I/O Modules	S4100-0005	Serial DACT (SDACT)	S2080-0009
4602 Series SCU/RCU	S4602-0001	TrueInsight Remote Service	S4100-0063
Agent Release Accessories	S2080-0010	Network Communications S4100-0056	S4100-0056
Fire Alarm Network Overview	S4100-0055	Multi-Signal Fiber Optics S4100-0049	S4100-0049
Network Communications	S4100-0056	PC Annunciator S4190-0013	S4190-0013
Automatic Extinguishing, Deluge and Preaction Sprinkler System Releasing Control for 4007ES	S4007-0003	120 VAC Desktop Remote Printer	S4190-0011

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TrueAlert ES Appliance Self-Test Last Test Results Report Example

Service Port Page 1

REPORT 10 TrueAlertES Self-Test Report 12:34:56pm MON 01-JUN-15

Point ID	Custom Label	Date	Visual	Audible
T1-1-1	VO FIRST FLOOR (up to 40 characters)	01-JUN-15	NO OUT	N/A
T1-2-5	AV FIRST FLOOR EAST WING	01-JUN-15	NO OUT	NORMAL
T7-3-55	AO SECOND FLOOR EAST WING	01-JUN-15	N/A	NO OUT
T8-2-45	AV SECOND FLOOR ROOM 29	01-JUN-15	NOT TST	N/A
T8-2-60	AV SECOND FLOOR ROOM 22	01-JUN-15	NORMAL	NORMAL
T1-2-4	AO FIRST FLOOR ROOM 17	01-JUN-15	N/A	UNSUPP

TRUEALERT_ES SELF-TEST REPORT COMPLETED

Press RETURN for next Screen OR CTRL-X to abort

Results Description:

NORMAL = works correctly

NO OUT = No Output, no light or sound was detected

NOT TST = no result; either the appliance did not return a result before the test ended or the test was conducted as silent (strobes only) and audible appliance was not activated

N/A = not applicable (no strobe on audible only, etc.)

UNSUPP = appliance not compatible with Self-Test (TrueAlert addressable appliance not TrueAlert ES addressable appliance)

Note: Additional TrueAlert ES Self-Test information is detailed in Operating Instructions 579-1165 shipped with the panel.

TrueAlert ES Appliance Self-Test All Test Results Report Example

Service Port Page 1

REPORT 10 TrueAlertES Self-Test Report 12:34:56pm MON 01-JUN-15

Point ID	Custom Label	Date	Visual	Audible
T1-1-1	VO FIRST FLOOR	01-JUN-15	NO OUT	N/A
T1-2-5	AV FIRST FLOOR EAST WING	01-JUN-15	NO OUT	NORMAL
T1-2-6	AV FIRST FLOOR NORTH ENTRANCE	12-MAY-15	NO OUT	NORMAL
T7-3-55	AO SECOND FLOOR EAST WING	01-JUN-15	N/A	NO OUT
T8-2-45	AV SECOND FLOOR ROOM 29	01-JUN-15	NOT TST	N/A
T1-1-11	AV FIRST FLOOR SOUTH ENTRANCE	12-MAY-15	NORMAL	NORMAL
T8-2-60	AV SECOND FLOOR ROOM 22	01-JUN-15	NORMAL	NORMAL
T1-2-4	AO FIRST FLOOR ROOM 17	01-JUN-15	N/A	UNSUPP
T1-2-7	AO FIRST FLOOR ROOM 12	12-MAY-15	N/A	UNSUPP
T8-3-43	AV SECOND FLOOR ROOM 25	12-MAY-15	UNSUPP	UNSUPP

TRUEALERT_ES SELF-TEST REPORT COMPLETED

Press RETURN for next Screen OR CTRL-X to abort

TrueAlert ES Appliance Self-Test Individual Appliance Report Example

CUSTOM LABEL	
4-1-2	AV
POINT ADDRESS: 4-1-2	Type: AV
CARD: 4 CHANNEL: 1 DEVICE: 2	
EXTENDED POWER SUPPLY	
UNIT NUMBER: 2	RUI NUMBER: LOCAL
PRIMARY STATUS	NORMAL
AUDIBLE GROUP CONFIG:	0 0 0
VISUAL GROUP CONFIG:	0 0 0
STYLE:	INDOOR
OPERATION:	GENERAL EVAC
CANDELA RATING	15 CD
COLOR LENS	YES
TONE TYPE	BROADBAND
CODING TYPE	TEMPORAL
VOLUME	HIGH
LAST TEST TIME:	MON 01-JUN-15 01:00 AM
LAST VISUAL TEST:	NORMAL
LAST AUDIBLE TEST:	NORMAL
LAST TEST VOLUME:	NORMAL
DEVICE TEST TROUBLE:	NORMAL

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