Simplex

# True*Alarm*® Fire Alarm Controls

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

Model 4010 Fire Alarm Control Panel for TrueAlarm Analog Sensors and IDNet™ Addressable Devices

## Features

### Standard features include:

- Up to 250 addressable TrueAlarm sensor or addressable device points using IDNet communications that operate *with either shielded or unshielded* twisted pair wiring**
- Four, 2 A notification appliance circuits (NACs) with solid state current protection
- Power supply/battery charger with 4 A available for NACs and auxiliary power
- Internal event reporting DACT module (standard on models 4010-9101, 4010-9102, & 4010-9150)
- UL listed to Standard 864

### Installation convenience features:

- Power-limited design provides electronic modules on a one-piece chassis with up-front terminal blocks for wiring access
- Compact NEMA 1 rated cabinet is available in beige or red and can be pre-shipped for early installation

### Setup, programming, and maintenance features:

- Device level ground fault search, locate, and isolate
- *Auto Program* for general alarm operation
- TrueAlarm individual analog sensing with front panel information and selection access
- "Dirty" TrueAlarm sensor maintenance alerts, service and status reports including "almost dirty"
- Default TrueAlarm sensor device type operation
- TrueAlarm sensor peak value performance report
- Duplicate address error detection
- Front panel or PC programming
- WALKTEST™ silent or audible system test†
- Software verification simulation mode

### Supports the following IDNet devices:

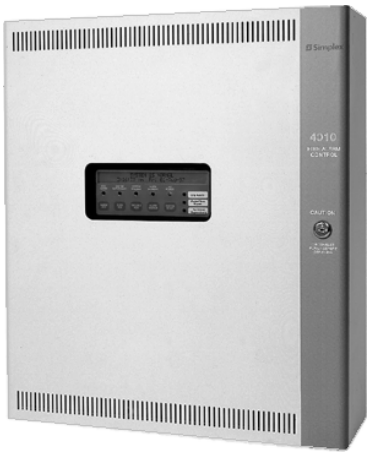
- Addressable manual stations; TrueAlarm sensor bases, duct housings, and isolator bases
- Quad-state zone adapter modules (ZAMs) for initiating device monitoring
- Quad-state line powered individual addressable modules (IAMs) for initiating device monitoring and relay control
- 4009 IDNet NAC Extenders and TrueAlert® Addressable Controllers and accessories

### Available option modules include:

- Door mounted 24 LED annunciator (std. on ULC models)
- Network connection, or Point Reporting DACT
- Class A, NAC adapter module
- RS-232 ports for printer and maintenance PC
- Expansion power supply; Auxiliary Relay Module or City Interface
- Equipment for Suppression Release Applications (refer to data sheet S4010-0003)

### Compatible with Simplex® auxiliary panels:

- 4003 Voice Control Panel
- 4081 Battery Cabinet with charger for 50 Ah batteries



4010 Fire Alarm Control Panel (with standard door)

## Description

**TrueAlarm fire alarm control panels** have the ability to provide location accuracy for monitoring and control. When equipped with TrueAlarm analog sensing for smoke and heat detection, the processing power of the control panel also has the ability to analyze conditions at each location to provide accurate detection with significantly reduced maintenance costs.

The 4010 TrueAlarm Fire Alarm Control Panel has been specifically designed to provide addressable operation and analog detection in a cost-effective package for application sizes that previously were considered only appropriate for conventional zoned monitoring.

**Installation and Service Ease.** The 4010 mounts on a single chassis for quick installation and removal. Terminal blocks are large and up-front for easy access and inspection. Optional modules are easily and quickly installed, and programmed as required.

The 4010 cabinet provides convenient stud markers for drywall thickness and nail-hole knockouts for quicker mounting. Smooth cabinet surfaces are provided for locally cutting conduit entrance holes exactly where required. 4010 cabinets and electronics can be ordered separately, allowing early cabinet installation.

**Ground Fault Assistance.** Ground fault problems often occur during installation. The 4010 provides isolating circuitry, control of isolator bases, and software-controlled sequencing to isolate ground faults to specific identified locations. This assistance helps the installer to accurately locate the wiring problem for quicker repair.

* Refer to page 6 for listing details. 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 7170-0026:226 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.

** TrueAlarm analog smoke detection and IDNet addressable devices are protected by one or more of the following U.S. Patents: 5,155,468; 5,173,683; 5,543,777; 5,400,014; 5,552,765; 5,552,763; DES. 377,460; 4,796,025; 5,966,002; and 6,034,601.

† WALKTEST system test is protected under U.S. patent # 4,725,818.

## 4010 Operator Control Summary

**Extensive Feature List.** The 4010 Fire Alarm Control Panel provides access to an extensive feature list that includes:

- Providing easy and powerful operator information with a logical, menu-driven display
- Extensive and automatic diagnostics for maintenance reduction
- History Logs available from the LCD or capable of (optionally) being printed
- Software Verification, allowing detailed logic programming simulation to be conducted without activating connected outputs
- Control Panel (or service PC) label editing
- Password access control
- Auto Program Quick Configuration (Quick-CFIG) of connected modules and IDNet devices for general alarm operation to quickly get the system up and running

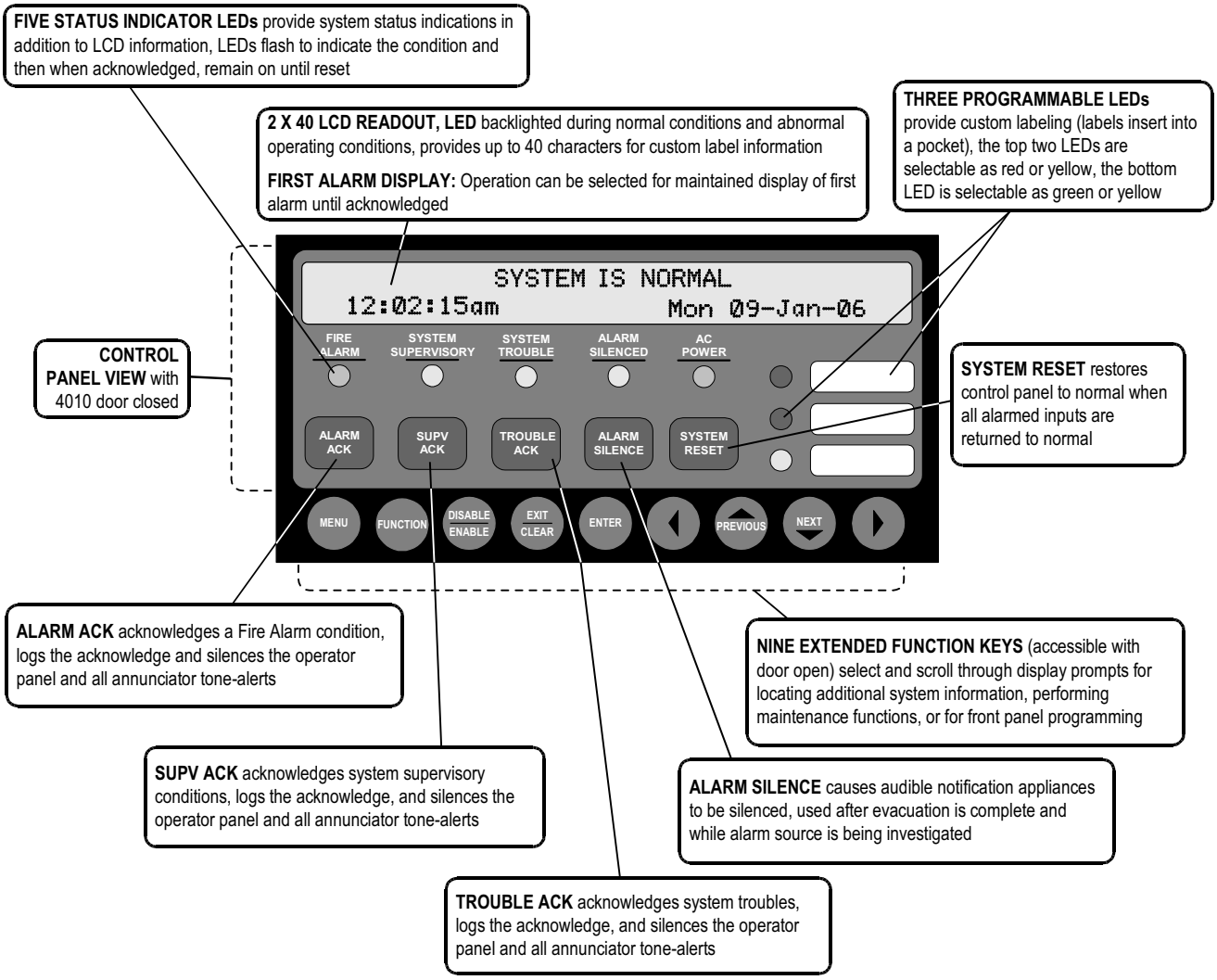
## 4010 Display Panel and Diagnostic Mode

**Convenient Status Information.** With the locking door closed, a window allows viewing of the status display. The 4010 status panel provides a two line by 40 character, super-twist LCD information display and eight status LED indicators as shown in the illustration below.

From this display, the LED indicators will describe the general category of activity being displayed with the LCD providing more detail. For the authorized user, unlocking the door will provide access to the control switches and allow further inquiry by scrolling the display for additional detail. (Refer to control panel functional illustration below.)

**WALKTEST Diagnostic Operation Mode.** The patented WALKTEST process allows a single person to perform system test. The system records test inputs such as intentional alarms or trouble and either logs the response (silent WALKTEST operation) or outputs a brief, recognizable audible notification signal (audible WALKTEST operation).

## Extended Operator Control Panel Functions



## IDNet Addressable Interface

**Overview.** The 4010 provides IDNet addressable device communications. Using a two-wire circuit, individual devices such as manual fire alarm stations, TrueAlarm sensors, and sprinkler waterflow switches can be directly connected (or interfaced) to the IDNet controller to communicate their identity and status. This addressability allows the location and condition of the connected device to be displayed on the 4010 panel LCD and on system annunciators. Additionally, control circuits (fans, dampers, etc.) may be individually controlled by using a relay IAM (individual addressable module). The 4009 IDNet NAC Extender or the TrueAlert Addressable controller can be controlled for local or remote notification appliance expansion. (Refer to compatible device lists on document S4090-0011 and to individual device documentation for further details.)

**Capacity.** A total of 250 addressable monitor and control points may be intermixed on the same pair of wires. By using Zone Adaptor Modules (ZAMs) or Individual Addressable Modules (IAMs), conventional initiating devices can be connected to the IDNet circuit.

**IDNet Addressable Operation.** The IDNet controller continuously interrogates each addressable device on the communication channel for status condition such as: normal, off-normal, alarm, supervisory, or trouble. Sophisticated poll and response communication techniques ensure supervision integrity and allow for "T-tapping" of the circuit for Class B operation.

**Wiring Requirements.** Refer to the specifications chart below. Distances are for shielded or unshielded wire. Shielded wire may provide protection from unexpected sources of interference and may be required for some applications.

**Wiring Specifications**

| | | |
|---|---|---|
| Size | | 18 AWG (0.82 mm$^2$ ) |
| Wire | Preferred | Shielded twisted pair (STP) |
| | Acceptable | Unshielded twisted pair (UTP) |
| Farthest Distance from Control Panel to Device | | Up to 2500 feet (762 m) |
| Total Wire Length Allowed With “T” Taps for Class B Wiring | | Up to 10,000 ft (3 km). |

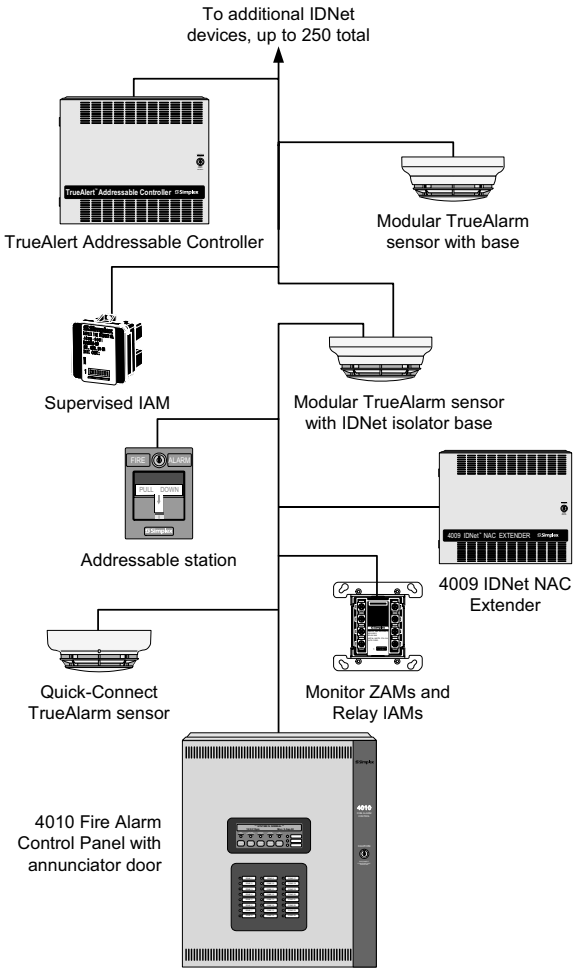
## TrueAlarm Analog Sensors

**TrueAlarm System Operation.** IDNet communications are used for TrueAlarm smoke and temperature sensors. Every four seconds, smoke sensors transmit an output value based on their smoke chamber condition. The 4010 CPU maintains a current value, peak value, and an average value of each sensor's output. 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.

**Programmable Sensitivity.** The sensitivity of each sensor can be field programmed at the 4010 Control Panel for different levels of smoke obscuration (in percent) or for specific heat detection levels. In order to evaluate whether the sensitivity should be revised, the peak value is stored in memory and can be easily read and compared to the alarm threshold directly in percent.

## TrueAlarm Analog Sensors *(Continued)*

**TrueAlarm heat sensors** can be selected for rate-of-rise detection as either 15° F (8.3° C) or 20° F (11.1° C) per minute with an independent fixed limit of 135° F (57° C) or 155° F (68° C). TrueAlarm heat sensors can also be programmed as a utility device to monitor for temperature extremes in the range from 32° F to 155° F (0° C to 68° C). This feature can provide freeze warnings or alert to HVAC system problems.




4010 Control Panel with Typical IDNet Devices

## Diagnostics and Default Device Type

TrueAlarm operation gives the 4010 system the ability to automatically indicate when a sensor is almost dirty, dirty, and excessively dirty. The NFPA 72 (*National Fire Alarm Code*) requirement for a test of the sensitivity range of the sensors is fulfilled by the TrueAlarm ability to maintain the sensitivity level of each sensor.

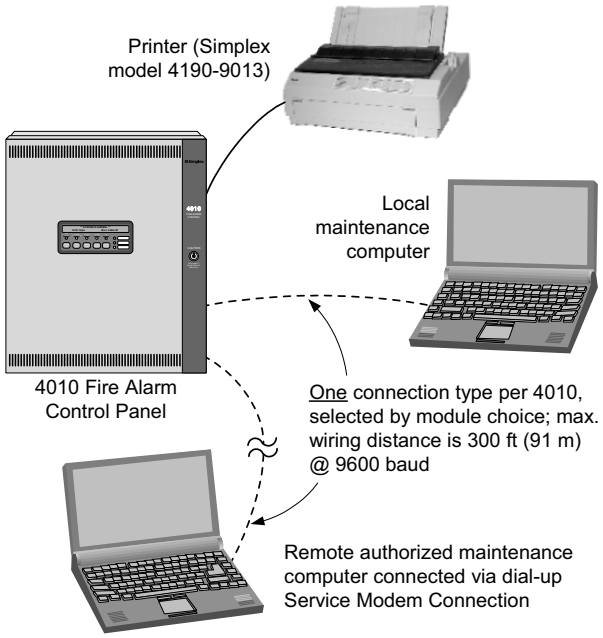
Modular TrueAlarm sensors use the same base and different sensor types (photoelectric smoke sensor, or heat sensor) can be easily interchanged to meet specific location requirements. This feature also allows intentional sensor substitution during building construction. When conditions are temporarily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

## TrueAlarm Information Details

**True Alarm sensor data** can be displayed on the system LCD, on a remote maintenance PC, or printed on a remote printer. With the proper operator access, a TrueAlarm Service Report can be generated to list the specific details of each TrueAlarm device. This report, as well as the Status Report can either be displayed on the remote maintenance PC or captured permanently by using a remote 80 character printer.

**Status and Service Reports.** The report samples below illustrate the format provided on either the remote maintenance PC or a printer. This information is available at the system LCD by identifying the specific point of interest and reading one point at a time.

**Compatible Printer.** Model 4190-9013 is a UL Standard 864 listed 80 column, 24 pin dot matrix printer (refer to data sheet S4190-0011). (Model 2190-9039, a 24 VDC, 40 column printer, is compatible with the 4010 for event printing only. Refer to data sheet S2190-0014.)




RS-232 Connection Options
(refer to module selection on page 6)

## TrueAlarm Status and Service Report Samples

```
Simplex 4010 Fire Alarm System                                          Page 1
REPORT 3 : TrueAlarm Status Report                    2:43:03 pm Mon 09-Jan-06


Zone                                                  Sensi-                    Almost
Name     Custom Label                                 tivity   Device Status     Dirty
M1-1     ANALOG PHOTO     CLEAN ROOM                   0.5 %   NORMAL
M1-2     ANALOG ION       CLEAN ROOM                   1.3 %   NORMAL
M1-3     ANALOG PHOTO     MAIN LOBBY                   2.5 %   NORMAL           *YES*
M1-4     ANALOG PHOTO     CONFERENCE ROOM 1            2.5 %   NORMAL
M1-10    HEAT DETECTOR    GARAGE                       135 F   NORMAL
M1-11    ANALOG PHOTO     KITCHEN                      3.7 %   NORMAL           *YES*

END OF REPORT
```

Typical TrueAlarm Status Report Information Printout and/or Maintenance PC Screen

```
Simplex 4010 Fire Alarm System                                          Page 1
REPORT 4 : TrueAlarm Service Report                   2:56:09 pm Mon 09-Jan-06


Dev                                              Alarm     Avg    Current/    Peak/   State
Num   Custom Label                               at:       val    % alarm    % alarm
1     ANALOG PHOTO - CLEAN ROOM                 0.5/ 83     67    68/ 1%     72/ 10%   NOR
2     ANALOG ION - CLEAN ROOM                   1.3/209     94    97/ 2%    101/  1%   NOR
3     ANALOG PHOTO - MAIN LOBBY                 2.5/185    117   117/ 0%    125/ 42%   NOR
4     ANALOG PHOTO - CONFERENCE ROOM 1          2.5/161     93    93/ 0%     93/  0%   NOR
10    HEAT DETECTOR - GARAGE                  135F/253     ---    63/-67F    66/ 69F   NOR
11    ANALOG PHOTO - KITCHEN                    3.7/216    116   116/ 1%    110/ 36%   NOR

END OF REPORT
```

Typical TrueAlarm Service Report Information Printout and/or Maintenance PC Screen

## Standard Panel Features

**N2 Communications for Serial Annunciator Control.** Control for up to 6 remote Simplex Annunciator products including 24 Point I/O Module, and LCD Annunciator. Includes extensive troubleshooting diagnostics. (See list in next column for compatible devices.)

**Access Port.** RS-232 service port for connecting PC tools for service diagnostics and for programming the CPU Flash EPROM memory.

**IDNet Addressable Communications Channel.** Addressable channel provides communications for up to 250 remote addressable devices, including TrueAlarm analog sensors and isolator bases (see details on page 3).

**Four NACs.** Class B output is standard, rated for 2 A @ 24 VDC nominal, with solid state current protection. Class A operation is optional with the addition of an adapter module.

**NAC operation** can be selected for "on-until-Silence" or "on-until-Reset," and can be Continuous, Temporal pattern, or March Time pattern. ***(March Time is selectable for 20 bpm or 120 bpm for conventional appliances; or 60 bpm for SmartSync™ appliances.)*** NACs are individually selectable to control Simplex synchronized strobes or for Simplex SmartSync control that provides separate horn and synchronized strobe control using a 2-wire circuit. (Class A, SmartSync circuits require SmartSync Control Module 4905-9938, refer to data sheet S4903-0010 for details.)

**Two Auxiliary Output Circuits.** Operation is programmable for trouble, alarm, supervisory, or other fire response functions. Output is one Form "C" dry contact each, rated 2 A @ 24 VDC. An optional relay kit is available for switching up to 0.5 A at 120 VAC.

**Standard Power Supply.** Output is rated 4 A for "Special Application" appliances and for "Regulated 24 DC" appliance power. ***(Special Application appliances include Simplex 4901, 4903, 4904, and 4906 Series horns, strobes, horn/strobes, and speaker/strobes. See page 7 for additional information.)*** Internal system power is provided separately, allowing the 4 A to be available for NAC and auxiliary power tap functions. Over-current protection is solid state and self-resetting.

**Auxiliary Power Tap.** Provides up to 0.5 A of the standard power supply voltage, over-current protected. Compatible uses include power for: remote LCD annunciators, 24 Point I/O modules, sensor bases and duct housings that require external power, and addressable devices requiring external power.

**Battery Charger.** Capable of charging up to 25 Ah sealed lead-acid batteries (4010 cabinet mounted). A recharge time of 24 hours is typical with stable 120 VAC input. For applications requiring larger batteries, external charger/cabinet assemblies are available.

A depleted battery cutout feature is programmable to advise and/or to reduce current when battery voltage is low.

## Optional Expansion Slot Modules

(The 4010 is available with a Simplex Network Interface. 4010 points can be declared "public.")

**Network Interface, Fixed Media.** Available for wired applications.

## Optional Expansion Slot Modules *(Cont'd)*

**Network Interface, Modular Media.** Available for wired connections or fiber optic. Require separate media modules. May be both wired, both fiber optic, or one of each.

**DACT, Point Reporting Module.** Provides serial output information that can send location details to a remote receiving station.

**DACT, Event Reporting Module.** For applications where simple event status information is required (Alarm, Trouble, Supervisory, and AC power failure).

**Dual RS-232 Module.** Available for interfacing to a printer and a maintenance PC.

**Single RS-232 Module with Service Modem Connection.** Provides one port dedicated for connection to a printer, and a second port dedicated for dial-in from a service computer, typically located off-site. With an off-site computer, programming changes and system diagnostics can be performed remotely, reducing service time for repair or reprogram. Security is maintained by password protection.

## Optional Chassis Mount Modules

**4 A Expansion Power Supply** provides two taps of 2 A each, 28 VDC, filtered, non-regulated. Output rating is 4 A for auxiliary power, 4 A for "Special Application" appliances and 2 A for "Regulated 24 DC" appliance power.

**Battery Meter Module** provides panel mounted ammeter and voltmeter for power supply monitoring.

**Dual Circuit Class A NAC Adapter Module** mounts on the main 4010 printed circuit assembly and provides the additional circuitry needed for Class A operation.

**Dual Circuit City Connect Module** provides the interface required for direct wired reporting to conventional city connection circuits. (Available with or without disconnect switches.)

**Expansion Power Distribution Module** provides two additional termination points for the 0.5 A auxiliary power output, or for one tap of the expansion power supply.

**Relay Option Module** provides three relays, one each for Alarm, Supervisory, and Trouble. Relay contacts are selectable for normally open or normally closed and are rated 2 A @ 32 VDC maximum.

## N2 Communications Modules

Up to six of the following modules may be connected to the Simplex N2 serial communications bus.

**4606-9101 LCD Annunciators** provide remote acknowledge, reset, and alphanumeric status display. (Refer to data sheet S4606-0001.)

**24 LED Annunciator Doors** are standard on ULC listed models and are available as door-only assemblies for electronics only packages or other aftermarket applications. This option uses the 24 Point I/O module with all points pre-assembled as LED outputs, with individual labels and each LED is selectable as red or yellow.

**4605 Series 24 Point I/O Modules** are available for remote mounting and provide 24 points that can be programmed as either general purpose switch inputs or system controlled outputs. Typical applications are for remote annunciators and monitoring and control of other related processes. (Refer to data sheet S4010-0002.)

## 4010 Fire Alarm Control Selection Chart and Module Location Rules (refer to diagrams on page 8)

| Category | Model | Description | | | Voltage | Color |
|---|---|---|---|---|---|---|
| **Control Panel Assembly** (select one) | 4010-9101 | **UL Listed 4010 Fire Alarm Control Panel** with: door, cabinet, power supply/battery charger, IDNet interface, 4 NACs, 2 programmable auxiliary relays, and external N2 communications interface; 4010-9101 and 4010-9102 include internal common event reporting DACT | | | 120 VAC | Beige |
| | 4010-9102 | | | | | Red |
| | 4010-9201 | | | | 240 VAC | Beige |
| | 4010-9202 | | | | | Red |
| | 4010-9101C | English | **ULC Listed 4010 Fire Alarm Control Panel**; same as above except: with 24 LED Annunciator door; and without DACT | | 120 VAC | Beige |
| | 4010-9101CF | French | | | | |
| | 4010-9150 | UL Listed | | **4010 Fire Alarm Control Panel, Electronics Only;** for pre-shipped cabinets, requires door and cabinet ordered separately; 120 VAC input; 4010-9150 has event reporting DACT; C & CF suffix models delete DACT | | |
| | 4010-9150C | ULC Listed | English | | | |
| | 4010-9150CF | | French | | | |

### Optional Expansion Slot Features (two slots are available, select modules as required)

| Category | Model | Description | |
|---|---|---|---|
| **Reporting and Network Modules** (select one) | 4010-9810 | DACT Module (Common Event Reporting) | Includes two, 7 ft (2.1 m) long RJ45 cables |
| | 4010-9816 | DACT Module (Point Reporting) | |
| | 4010-9821 | Network Interface Module with fixed, wired connections | |
| | 4010-9817 | Network Interface Module, Modular; requires 2 (In/Out) media modules (see below) | |
| **Media Modules** | 4010-9818 | Network Wired Media Module | Media modules mount on the 4010-9817 module without impact to slot allocation space. |
| | 4010-9819 | Network Fiber Optic Media Module | |
| **RS-232 Communications** (select one) | 4010-9811 | Dual RS-232 Interface Module | |
| | 4010-9812 | Single RS-232 Interface Module with Service Modem connection | |

### Chassis Mounted Expansion Modules (select as required)

| Category | Model | Description | |
|---|---|---|---|
| **Expansion Power Supply** (select one) | 4010-9813 | 120 VAC input | 4 A Expansion Power Supply; rated 4 A for "Special Application" appliances; rated 2 A for "Regulated 24 DC" appliance power |
| | 4010-9823 | 240 VAC input | |
| **Optional Features** (select one) | 4010-9820 | Battery Meter Module (ammeter and voltmeter) | |
| | 4010-9825 | 24 VDC Expansion Power Distribution Module, provides two additional termination points for an expansion power supply tap or the auxiliary power output | |
| **Optional Features** (select as indicated) | 4010-9806 | Dual Circuit Class A NAC Adapter Module, **two maximum** | |
| | 4010-9809 | Dual Circuit City Connect Module | **Select one maximum** |
| | 4010-9829* | Dual Circuit City Connect Module w/o disconnect switches | |
| | 4010-9803 | Relay Option Module | |

### Accessories

| Category | Model | Description | |
|---|---|---|---|
| **Optional Features** | 4010-9826 | 120 VAC Auxiliary Relay Kit, allows **one** auxiliary relay to control up to 0.5 A @120 VAC, select as required; **2 maximum** | |
| | 4010-9830 (CAF) | Suppression Release Appliqué, required for suppression release applications; suffix CAF selects a French appliqué | |
| | 2975-9801 | Semi-flush trim, beige, 1-7/16" (37 mm) wide | |
| | 2975-9802 | Semi-flush trim, red, 1-7/16" (37 mm) wide | |
| **Batteries** (required if batteries are internal; select one size; **two batteries are required**) | 2081-9272 | 6.2 Ah Battery, 12 VDC | |
| | 2081-9274 | 10.0 Ah Battery, 12 VDC | |
| | 2081-9288 | 12.7 Ah Battery, 12 VDC | |
| | 2081-9275 | 18 Ah Battery, 12 VDC; **NOTE: This battery size will not allow bottom entry conduit** | |
| | 2081-9287 | 25 Ah Battery, 12 VDC | |
| **Cabinets** (select one if pre-shipped) | 2975-9215 | Red Cabinet | Dimensions: 22" H x 18" W x 5-3/8" D (559 mm x 457 mm x 137 mm) |
| | 2975-9214(CF) | Beige Cabinet; CF suffix has French labels | |
| **Doors** (select one if pre-shipped or for use with 4010-9150) | 4010-9858 | Red Door with dress panel | Dimensions: 22" H x 18" W x 5/8" D (559 mm x 457 mm x 16 mm) |
| | 4010-9857(CF) | Beige Door with dress panel; CF has French labels | |
| | 4010-9860 (CAF)* | Beige Door with 24 LED Annunciator and dress panel; CAF suffix selects French for ULC applications | Dimensions: 22" H x 18" W x 1-23/32"D (559 mm x 457 mm x 44 mm) [see also S4010-0002] |
| | 4010-9861* | Red Door with 24 LED Annunciator and dress panel | |

* As of document revision date: 4010-9829 is not ULC listed;
4010-9860 and 4010-9861 are listed by UL, ULC, and CSFM; and FM approved;
4010-9860CAF is ULC listed and FM approved only.

## 4010 Operating Specifications

| Input Power Requirements | Voltage Range | Frequency | Maximum Current |
|---|---|---|---|
| AC Input, 120 VAC base models | 102 to 132 VAC | 60 Hz | 2 A |
| AC Input, 240 VAC base models | 204 to 264 VAC | 50/60 Hz | 1 A |
| AC Input with 120 VAC expansion power supply | 102 to 132 VAC | 60 Hz | 4 A |
| AC Input with 240 VAC expansion power supply | 204 to 264 VAC | 50/60 Hz | 2 A |

| Environmental | |
|---|---|
| Operating Temperature Range | 32° to 120°F (0° to 49° C) |
| Operating Humidity Range | up to 93% RH, non-condensing @ 100.4° F (38° C) maximum |

| Output Ratings | | |
|---|---|---|
| Standard Power Supply Output | | Rated 4 A for “Special Application” appliances and for “Regulated 24 DC” appliance power; Battery charger for up to 25 Ah sealed lead-acid batteries |
| Notification Appliance Reference | Special Application | Simplex 4901, 4903, 4904, and 4906 Series horns, strobes, and combination horn/strobes and speaker/strobes (contact your Simplex product representative for compatible appliances) |
| | Regulated 24 DC | Power for other appliances listed to UL Standard 1971 or UL Standard 464; use associated external synchronization modules where required |
| Auxiliary Power Output Tap from Standard Power Supply | | Rated 0.5 A maximum @ 19.4 to 32 VDC; subtract current used from standard power supply output |
| Expansion Power Supply Output | | Rated 4 A for “Special Application” appliances and auxiliary power; Rated 2 A for “Regulated 24 DC” appliance power; Two output taps of 2 A each are provided |
| NAC Ratings | | 2 A each maximum; up to 33 synchronized strobes maximum per NAC |

**Current Ratings for Optional Modules and Remote LCD Annunciator**

| Model | Module | Supervisory Current | Alarm Current |
|---|---|---|---|
| 4010-9810 | DACT (Common Event Reporting) | 40 mA | 40 mA |
| 4010-9816 | DACT (Point Reporting) | 40 mA | 40 mA |
| 4010-9821 | Network, wired communications | 125 mA | 125 mA |
| 4010-9817 | Network Modular, add media cards separately | 24 mA | 24 mA |
| 4010-9818 | Network Wired Media | 47 mA | 47 mA |
| 4010-9819 | Network Fiber Optic Media | 36 mA | 36 mA |
| 4010-9811 | Dual RS-232 | 75 mA | 75 mA |
| 4010-9812 | Single RS-232 with Service Modem | 100 mA | 100 mA |
| 4010-9806 | Dual Class A NAC Adapter | 0 mA | 0 mA |
| 4010-9809 | Dual Circuit City Connect | 20 mA | 36 mA |
| 4010-9829 | Dual Circuit City Connect w/o disconnect switches | 20 mA | 36 mA |
| 4010-9803 | Relay Option Module | 10 mA | 37 mA |
| 4010-9860<br>4010-9861<br>& ULC 4010s | 24 LED Annunciator door | 60 mA | 83 mA<br>(all LEDs on) |
| 4606-9101 | Remote LCD Annunciator (refer to data sheet S4606-0001) | 65 mA | 140 mA |

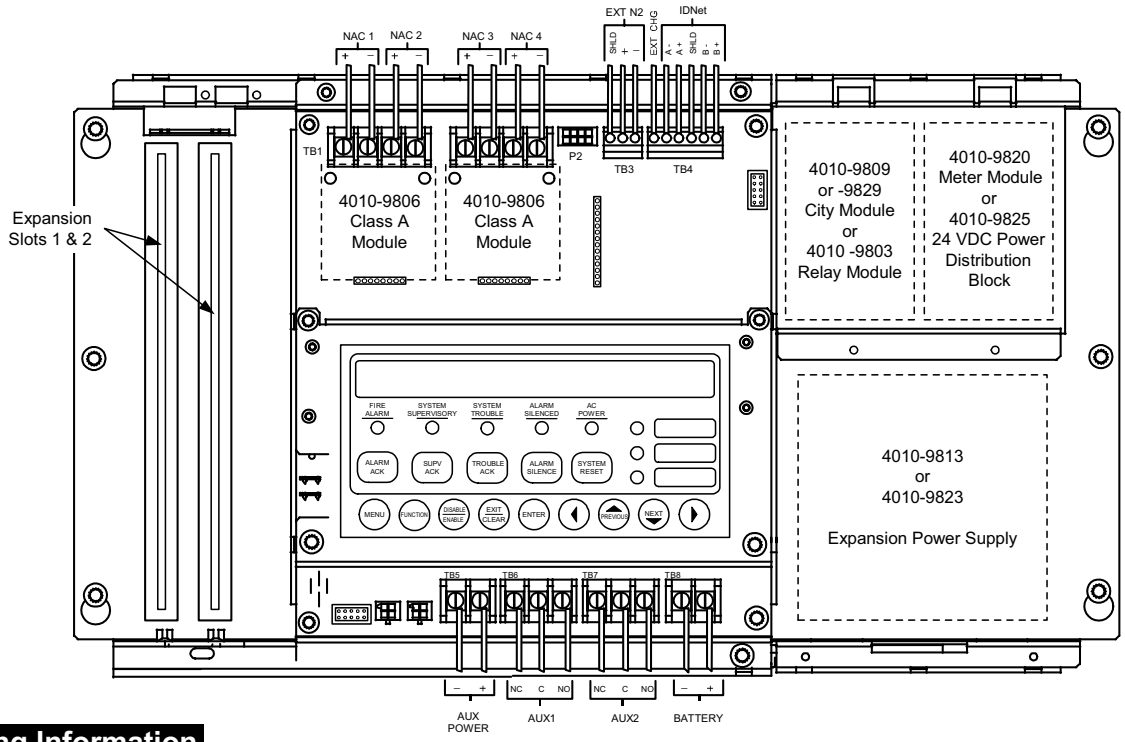
**System Current (supplied separate from power supply output)**

| Base System with: | Supervisory Current** | Alarm Current** |
|---|---|---|
| no IDNet devices | 195 mA | 295 mA |
| 50 IDNet devices | 230 mA | 330 mA |
| 100 IDNet devices | 265 mA | 365 mA |
| 150 IDNet devices | 300 mA | 400 mA |
| 200 IDNet devices | 335 mA | 435 mA |
| 250 IDNet devices | 370 mA | 470 mA |

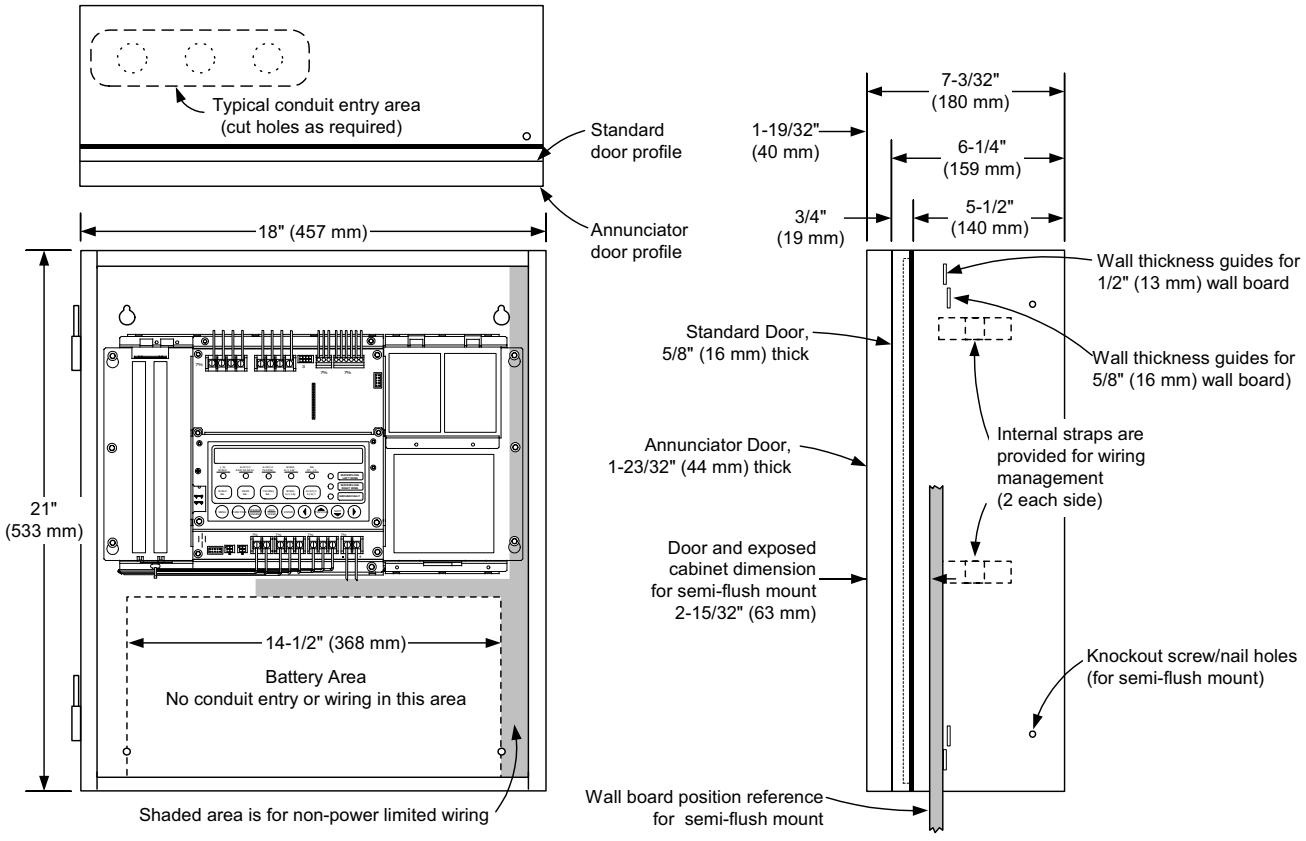
**** Current Calculation Information:**

1. To determine total supervisory current, add currents of modules in panel to base system value **and** all auxiliary loads.
2. To determine total alarm current, add currents of modules in panel to base system alarm current **and** add all panel NAC loads **and** all auxiliary loads.

## 4010 Module Layout Reference




## Mounting Information




*Tyco, Simplex, the Simplex logo, TrueAlarm, WALKTEST, IDNet, SmartSync, and TrueAlert are trademarks of Tyco International AG or its affiliates in the U.S. and/or other countries. NFPA 72 and National Fire Alarm Code are registered trademarks of the National Fire Protection Association (NFPA).*



*© 2006 Tyco Safety Products Westminster. All rights reserved. All specifications and other information shown were current as of document revision date and are subject to change without notice.*