



Plan Review, Inspection, and Permit Fees

Application Number : **18-50044037**

| | | | | |
|-----------------------------|-------------------------------------|---|-----------|---------------|
| \$200.00 | <input type="checkbox"/> | Explosive Material (90 Days) | \$ | - |
| \$100.00 | <input type="checkbox"/> | Explosive Materials (72 Hours) | \$ | - |
| \$100.00 | <input type="checkbox"/> | Fireworks Public Display | \$ | - |
| \$50.00 | <input type="checkbox"/> | Final Inspection | \$ | - |
| \$35.00 + \$2.00 per device | <input checked="" type="checkbox"/> | Fire Alarm Testing | \$ | 35.00 |
| \$35.00 + \$2.00 per nozzle | <input type="checkbox"/> | Fixed Fire Suppression | \$ | - |
| \$75.00 | <input type="checkbox"/> | Insecticide Fog/Fumigation | \$ | - |
| \$100.00 | <input type="checkbox"/> | Pipe Test/UST/AGST | \$ | - |
| \$50.00 | <input type="checkbox"/> | Plans up to 5000 sq ft | \$ | - |
| \$100.00 | <input type="checkbox"/> | Plans 5001 sq ft to 10,000 sq ft | \$ | - |
| \$150.00 | <input type="checkbox"/> | Plans 10,001 sq ft to 25,000 sq ft | \$ | - |
| \$250.00 | <input type="checkbox"/> | Plans 25,001 sq ft and over | \$ | - |
| \$35.00 + 2.00 per head | <input type="checkbox"/> | Sprinkler Certification Test | \$ | - |
| \$50.00 | <input type="checkbox"/> | Standpipe Testing | \$ | - |
| \$50.00 | <input type="checkbox"/> | Special Assembly (ie. amusement buildings, carnivals, fairs) | \$ | - |
| \$75.00 | <input type="checkbox"/> | Tents/Canopies/Air Supported Structure | \$ | - |
| \$100.00 | <input type="checkbox"/> | Tank Installation (charge for each tank) | \$ | - |
| \$100.00 | <input type="checkbox"/> | Tank Removal (charge for each tank) | \$ | - |
| | 34 | Total Devices/Heads | \$ | 68.00 |
| | | Total Cost | \$ | 103.00 |

Code Enforcement Official

D. Banks Wallace

7/30/2018



Fire Marshal Division

July 30, 2018

Mr. Brett Strickland

**Re: Student Life Renovation
Campbell University
Lillington, NC 27546**

Application Number 18-50044037

Mr. Strickland,

Thank you for submitting the plans for the building alterations. The plans have been carefully reviewed by a qualified code enforcement official to examine for compliance with the North Carolina Fire Prevention Code and all other fire protection regulatory documents. There are some items that were found during the plan review process that need to be addressed before a final inspection of the facility can be given. These items are outlined and described below.

- **Fire Alarm System Upgrade Notes**

All items in notes are to be completed at the time of final.

- Provide a record of completion.
- The Fire marshal's office will complete an acceptance test at completion of project.
- Provide a copy of account history after the acceptance test is completed and approve.
- Provide an accurate zone map at the FACP and remote annunciator panel.
- All work/installation shall be compliant with the NCSFC and NFPA 72.
- Call Fire Marshal's office to schedule the fire alarm acceptance test. (910-984-4003)

- **Notes**

- **All additions to existing systems shall properly communicate to existing fire panel.**
- **A fire alarm construction permit is required.**
- **Please schedule all inspections through the Fire Marshal's Office. 910-984-4003.**



Thank you again for submitting the plans for the building alterations. Please review the plans and adhere to any notes and alterations that were made in addition to the original drawings. If you have any questions, please do not hesitate to call this office.

Again, thank you and we look forward to working with you during the construction period!

Sincerely,



D. Banks Wallace
Chief Deputy Fire Marshal



HARNETT COUNTY EMERGENCY SERVICE
REVIEWED FOR CODE COMPLIANCE

Application for Plan Review

D.B. WALLACE
CODE COMPLIANCE OFFICER

5/21/18
DATE

Application # 18-50044037

Date Received: 5/16/18 Received By: [Signature]

Name of Project: CU Student Life Renovation

Physical Address of Project: 44 Harmon Rd

Lillington, NC 27546

Plans Submitted By: Southeastern Construction of Buies Creek, LLC

Project Phone: (919)-805-0664

Contact Person/Address: Brett Strickland

228 Airport Rd.

Erwin, NC 28339

Contact Email: bretts@si-nc.com

Contact Phone: (919)-805-0664 ()- -

Contractor's Name/Info: Southeastern Construction of Buies Creek, LLC

228 Airport Rd.

Erwin, NC 28339

Contractor's Phone: (919)-805-0664

- Plans that are submitted will be reviewed as quickly as possible with an average time of review between 7-10 working days.
- Status checks may be conducted on plan reviews by visiting the website <http://hteweb.harnett.org/Click2GovBP/Index.jsp> or by calling the Harnett County Central Permitting Office (910-893-7525, Option #2), or the Harnett County Fire Marshal's Office (910-893-7580).
- Approved plans must be picked up from the Central Permitting Office and all fees paid before any required inspections can be conducted.

PROJECT: CAMPBELL SAULS HALL STUDENT LIFE
CENTER

PROJECT NUMBER: 18:607360101/250:439710

LOCATION: BUIES CREEK, NC

FIRE ALARM SYSTEM

DATE: 07-26-18

Submitted By:



540 Civic Boulevard, Suite 105
Raleigh, NC 27610

919-279-6400
FAX 919-279-6439

Sales Rep: Gordon Gibb

Prepared by: Joe Simmons



50 Technology Drive
Westminster, Ma 01441-0001
(978) 731-2500
FAX: (978) 731-7856

TO:
Southeastern Interiors
PO Box 4200
BUIES CREEK, NC 27506-0000

Project: CU Saul Hall Upfit
Customer Reference:
Johnson Controls Reference: L37352-000304
Date: 07/26/2018
Page 1 of 1

| QUANTITY | MODEL NUMBER | DESCRIPTION |
|----------|--------------|---------------------------------|
| | | System |
| | | Equipment |
| 8 | 4098-9714 | PHOTO SENSOR |
| 8 | 4098-9792 | SENSOR BASE |
| 3 | 4906-9230 | MC TRUEALERT A/V CEILING MT WHT |

Features

TrueAlarm analog sensing provides:

- Digital transmission of analog sensor values via IDNet or MAPNET II two-wire communications

For use with the following Simplex® products:

- 4007ES, 4010, 4010ES, 4100ES, and 4100U Series control panels; and 4008 Series control panels with reduced feature set (refer to data sheet S4008-0001 for details)
- 4020, 4100, and 4120 Series control panels, Universal Transponders, and 2120 TrueAlarm CDTs equipped for MAPNET II operation

Fire alarm control panel provides:

- Peak value logging allowing accurate analysis of each sensor for individual sensitivity selection
- Sensitivity monitoring satisfying NFPA 72 sensitivity testing requirements; automatic individual sensor calibration check verifies sensor integrity
- Automatic environmental compensation, multi-stage alarm operation, and display of sensitivity directly in percent per foot
- Ability to display and print detailed sensor information in plain English language

Photoelectric smoke sensors provide:

- Seven levels of sensitivity from 0.2% to 3.7% (refer to additional information on page 3)

Heat sensors provide:

- Fixed temperature sensing
- Rate-of-rise temperature sensing
- Utility temperature sensing
- Listed to UL 521 and ULC-S530

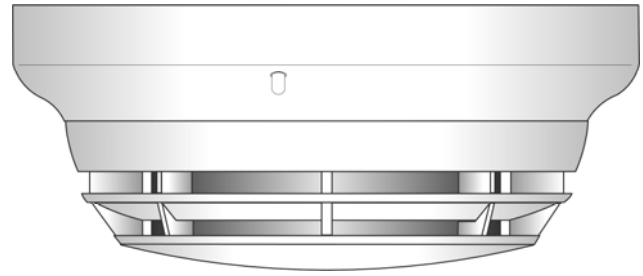
General features:

- Operation is for ceiling or wall mounting
- Listed to UL 268 and ULC-S529
- Louvered smoke sensor design enhances smoke capture by directing flow to chamber; entrance areas are minimally visible when ceiling mounted
- Designed for EMI compatibility
- Magnetic test feature is provided
- Different bases are available to support a supervised or unsupervised output relay, and/or a remote LED alarm indicator

Additional base reference:

- For isolator bases, refer to data sheet S4098-0025
- For sounder bases, refer to data sheet S4098-0028
- For photo/heat sensors, refer to data sheet S4098-0024 (single address) and S4098-0033 (dual address)

* These products have been approved by the California State Fire Marshal (CSFM) pursuant to Section 13144.1 of the California Health and Safety Code. See CSFM Listings 7272-0026:218, 7271-0026:231, 7270-0026:216, and 7300-0026:217 for allowable values and/or conditions concerning material presented in this document. 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.



4098-9714 TrueAlarm Photoelectric
Sensor Mounted in Base

Description

Digital Communication of Analog Sensing.

TrueAlarm analog sensors provide an analog measurement digitally communicated to the host control panel using Simplex addressable communications. At the control panel, the data is analyzed and an average value is determined and stored. An alarm or other abnormal condition is determined by comparing the sensor's present value against its average value and time.

Intelligent Data Evaluation. Monitoring each sensor's average value provides a continuously shifting reference point. This software filtering process compensates for environmental factors (dust, dirt, etc.) and component aging, providing an accurate reference for evaluating new activity. With this filtering, there is a significant reduction in the probability of false or nuisance alarms caused by shifts in sensitivity, either up or down.

Control Panel Selection. Peak activity per sensor is stored to assist in evaluating specific locations. The alarm set point for each TrueAlarm sensor is determined at the host control panel, selectable as more or less sensitive as the individual application requires.

Timed/Multi-Stage Selection. Sensor alarm set points can be programmed for timed automatic sensitivity selection (such as more sensitive at night, less sensitive during day). Control panel programming can also provide multi-stage operation per sensor. For example, a 0.2% level may cause a warning to prompt investigation while a 2.5% level may initiate an alarm.

Sensor Alarm and Trouble LED Indication. Each sensor base's LED pulses to indicate communications with the panel. If the control panel determines a sensor is in alarm, or is dirty or has some other type of trouble, the details are announced at the control panel and that sensor base's LED will be turned on steadily. During a system alarm, the control panel will control the LEDs such that an LED indicating a trouble will return to pulsing to help identify the alarmed sensors.

TrueAlarm Sensor Bases and Accessories

Sensor Base Features

Base mounted address selection:

- Address remains with its programmed location
- Accessible from front (DIP switch under sensor)

General features:

- Automatic identification provides default sensitivity when substituting sensor types
- Integral red LED for power-on (pulsing), or alarm or trouble (steady on)
- Locking anti-tamper design mounts on standard outlet box
- Magnetically operated functional test

Sensor Bases

4098-9792, Standard Sensor Base

4098-9789, Sensor Base with wired connections for:

- 2098-9808 Remote LED alarm indicator or 4098-9822 relay (relay is unsupervised and requires separate 24 VDC)

Supervised Relay Bases (not compatible with 2120 CDT):

- **4098-9791, 4-Wire Sensor Base**, use with remote or locally mounted 2098-9737 relay, requires separate 24 VDC
- **4098-9780, 2-Wire Sensor Base**, use with remote or locally mounted 4098-9860 relay, no separate power required
- Supervised relay operation is programmable and can be manually operated from control panel
- Includes wired connections for remote LED alarm indicator or 4098-9822 relay (relay is unsupervised and requires separate 24 VDC)

Sensor Base Options

2098-9737, Remote or local mount supervised relay:

- DPDT contacts for resistive/suppressed loads, power limited rating of 3 A @ 28 VDC; non-power limited rating of 3 A @ 120 VAC (requires external 24 VDC coil power)

4098-9860, Remote or local mount supervised relay:

- SPDT dry contacts, power limited rating of 2 A @ 30 VDC, resistive; non-power limited rating of 0.5 A @ 125 VAC, resistive

4098-9822, LED Annunciation Relay:

- Activates when base LED is on steady, indicating local alarm or trouble
- DPDT contacts for resistive/suppressed loads, power limited rating of 2 A @ 28 VDC; non-power limited rating of 1/2 A @ 120 VAC, (requires external 24 VDC coil power)

4098-9832, Adapter plate:

- Required for surface or semi-flush mounting to 4" square electrical box and for surface mounting to 4" octagonal box
- Can be used for cosmetic retrofitting to existing 6-3/8" diameter base product

2098-9808, Remote red LED Alarm Indicator:

- Mounts on single gang box (shown in illustration to right)



Description

TrueAlarm sensor bases contain integral addressable electronics that constantly monitor the status of the detachable photoelectric or heat sensors. Each sensor's output is digitized and transmitted to the system fire alarm control panel every four seconds.

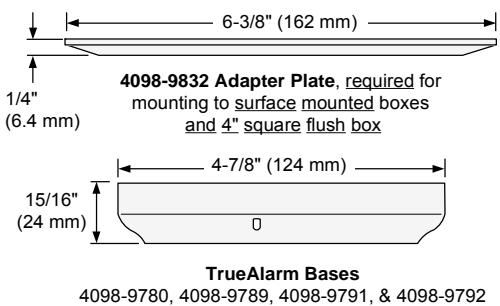
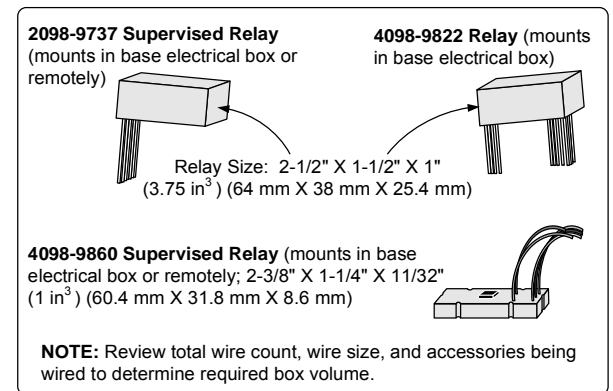
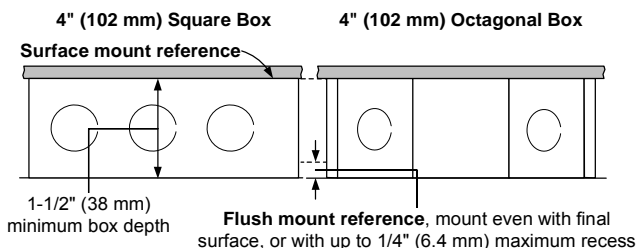
Since TrueAlarm sensors use the same base, different sensor types can be easily interchanged to meet specific location requirements. This feature also allows intentional sensor substitution during building construction. When conditions are temporarily dusty, instead of covering the smoke sensors (causing 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 providing heat detection for building protection at that location.

Mounting Reference

Electrical Box Requirements: (boxes are by others)

Without relay in the box: 4" octagonal or 4" square, 1-1/2" deep; single gang, 2" deep

With relay in the box: 4" octagonal or 4" square, 1-1/2" deep, with 1-1/2" extension ring



TrueAlarm Sensors

Features

Sealed against rear air flow entry

Interchangeable mounting

EMI/RFI shielded electronics

Heat sensors:

- Selectable rate compensated, fixed temperature sensing with or without rate-of-rise operation
- Rated spacing distance between sensors:

| Fixed Temp. Setting | UL & ULC Spacing | FM Spacing, Either Fixed Temperature Setting |
|---------------------|------------------------|---|
| 135° F (57.2° C) | 60 ft x 60 ft (18.3 m) | 20 ft x 20 ft (6.1 m) for fixed temperature only; RTI = Quick |
| 155° F (68° C) | 40 ft x 40 ft (12.2 m) | 50 ft x 50 ft (15.2 m) for fixed temperature with either rate-of-rise selection; RTI = Ultra Fast |

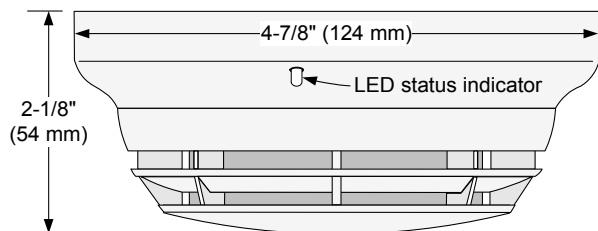
Smoke Sensors:

- Photoelectric technology sensing
- 360° smoke entry for optimum response
- Built-in insect screens

4098-9714 Photoelectric Sensor

TrueAlarm photoelectric sensors use a stable, pulsed infrared LED light source and a silicon photodiode receiver to provide consistent and accurate low power smoke sensing. Seven levels of sensitivity are available for each individual sensor, ranging from 0.2% to 3.7% per foot of smoke obscuration. Sensitivities of 0.2%, 0.5%, and 1% are for special applications in clean areas. Standard sensitivities are 1.5%, 2.0%, 2.5%, 3.0%, and 3.7%. Application type and sensitivity are selected and then monitored at the fire alarm control panel.*

The sensor head design provides 360° smoke entry for optimum response to smoke from any direction. Due to its photoelectric operation, air velocity is not normally a factor, except for impact on area smoke flow.



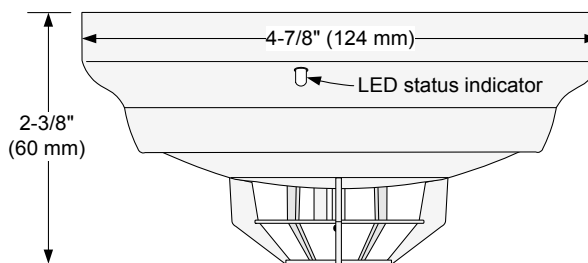
4098-9714 Photoelectric Sensor with Base

4098-9733 Heat Sensor

TrueAlarm heat sensors are self-restoring and provide rate compensated, fixed temperature sensing, selectable with or without rate-of-rise temperature sensing. Due to its small thermal mass, the sensor accurately and quickly measures the local temperature for analysis at the fire alarm control panel.

Rate-of-rise temperature detection is selectable at the control panel for either 15° F (8.3° C) or 20° F (11.1° C) per minute. Fixed temperature sensing is independent of rate-of-rise sensing and programmable to operate at 135° F (57.2° C) or 155° F (68° C). In a slow developing fire, the temperature may not increase rapidly enough to operate the rate-of-rise feature. However, an alarm will be initiated when the temperature reaches its rated fixed temperature setting.

TrueAlarm heat sensors can 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. Refer to specific panels for availability.



4098-9733 Heat Sensor with Base

WARNING: In most fires, hazardous levels of smoke and toxic gas can build up before a heat detection device would initiate an alarm. In cases where Life Safety is a factor, the use of smoke detection is highly recommended.

Application Reference

Sensor locations should be determined only after careful consideration of the physical layout and contents of the area to be protected. Refer to NFPA 72, the *National Fire Alarm and Signaling Code*. On smooth ceilings, smoke sensor spacing of 30 ft (9.1 m) may be used as a guide.*

* For detailed application information including sensitivity selection, refer to Installation Instructions 574-709.

TrueAlarm Analog Sensing Product Selection Chart

TrueAlarm Sensor Bases (for use with Sensors 4098-9714 and 4098-9733)

(Refer to Application Manual 574-709 and Installation Instructions 574-707 for additional information)

| Model* | Color | Description | Compatibility | Mounting Requirements |
|---------------|-------|--|---|---|
| 4098-9792 | White | Standard Sensor Base | No options | 4" octagonal or 4" square box, 1-1/2" min. depth; or single gang box, 2" min. depth |
| 4098-9776 | Black | | | |
| 4098-9789 | White | Sensor Base with connections for Remote LED Alarm Indicator or Unsupervised Relay | 2098-9808 Remote Alarm Indicator or 4098-9822 Unsupervised Relay | 4" octagonal or 4" square box Note: Box depth requirements depend on total wire count and wire size, refer to accessories list below for reference. ** NOTE: 4098-9791 and 4098-9780 are NOT compatible with the 2120 CDT |
| 4098-9789 IND | White | | | |
| 4098-9775 | Black | | | |
| 4098-9791** | White | 4-Wire Sensor Supervised Relay Base with connections for LED Indicator or Unsupervised Relay | 2098-9737 Supervised Remote Relay 2098-9808 Remote Alarm Indicator or 4098-9822 Unsupervised Relay | |
| 4098-9780** | White | 2-Wire Sensor Supervised Relay Base with connections for LED Indicator or Unsupervised Relay | 4098-9860 Supervised Remote Relay 2098-9808 Remote Alarm Indicator or 4098-9822 Unsupervised Relay | |

TrueAlarm Sensors

| Model* | Model* | Description | Compatibility | Mounting Requirements |
|---------------|--------|----------------------------|--|----------------------------|
| 4098-9714 | White | Photoelectric Smoke Sensor | Bases 4098-9775, 4098-9776, 4098-9792, 4098-9789, 4098-9791, and 4098-9780 | Refer to base requirements |
| 4098-9714 IND | Black | | | |
| 4098-9774 | Black | Heat Sensor | | |
| 4098-9733 | White | | | |
| 4098-9778 | Black | | | |

TrueAlarm Sensor/Base Accessories

| Model | Description | Compatibility | Mounting Requirements |
|-----------|--|--|---|
| 2098-9737 | Supervised Relay, mounts remote or in base electrical box | For use with 4098-9791 base | Remote Mounting requires 4" octagonal or 4" square box, 1-1/2" minimum depth Base Mounting requires 4" octagonal box, 2-1/8" deep with 1-1/2" extension ring |
| 4098-9860 | Supervised Relay, mounts remote or in base electrical box | For use with 4098-9780 base | |
| 2098-9808 | Remote Red LED Alarm Indicator on single gang stainless steel plate | Bases 4098-9789, 4098-9791, and 4098-9780 | Single gang box, 1-1/2" minimum depth |
| 4098-9822 | Unsupervised Relay, tracks base LED status; Note: Mounts only in base electrical box | Bases 4098-9789, 4098-9791, and 4098-9780 | 4" octagonal box, 2-1/8" deep with 1-1/2" extension ring |
| 4098-9832 | Adapter Plate | Bases 4098-9792, 4098-9789, 4098-9791, and 4098-9780 | Required for surface or semi-flush mounted 4" square box and for surface mounted 4" octagonal box |

* Note: Model numbers ending in IND are assembled in India.

Specifications

General Operating Specifications

| | |
|--|--|
| Communications and Sensor Supervisory Power | IDNet or MAPNET II communications, auto-selected, 1 address per base |
| Communications Connections | Screw terminals for in/out wiring, 18 to 14 AWG (0.82 mm ² to 2.08 mm ²) |
| Remote LED Alarm Indicator Current | 1 mA typical, no impact to alarm current |
| Remote LED Alarm Indicator and Relay Connections | Color coded wire leads, 18 AWG (0.82 mm ²) |
| UL Listed Operating Temperature Range | 32° to 100° F (0° to 38° C) |
| Operating Temperature Range | with 4098-9733 Heat Sensor 32° to 122° F (0° to 50° C) with 4098-9714 Smoke Sensor 15° to 122° F (-9° to 50° C) |
| Storage Temperature Range | 0° F to 140° F (-18° C to 60° C) |
| Humidity Range | 10 to 95% RH |
| 4098-9714 Smoke Sensor Air Velocity Rating | 0-4000 ft/min (0-1220 m/min) |
| Housing Color | Frost White or Black |

4098-9791 Base With Supervised Remote Relay 2098-9737 (see page 2 for contact ratings)

| | |
|--|----------------------------|
| Externally Supplied Relay Coil Voltage | 18-32 VDC (nominal 24 VDC) |
| Supervisory Current | 270 µA, from 24 VDC supply |
| Alarm Current with 2098-9737 Relay | 28 mA, from 24 VDC supply |

4098-9780 Base With Supervised Remote Relay 4098-9860 (see page 2 for contact ratings)

| | |
|-------|------------------------------|
| Power | Supplied from communications |
|-------|------------------------------|

4098-9822 Unsupervised Relay, Requirements for Bases 4098-9789, 4098-9791, and 4098-9780 (see page 2 for contact ratings)

| | |
|--|-----------------------------------|
| Externally Supplied Relay Coil Voltage | 18-32 VDC (nominal 24 VDC) |
| Supervisory Current | Supplied from communications |
| Alarm Current | 13 mA from separate 24 VDC supply |

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Tyco Fire Protection Products • Westminster, MA • 01441-0001 • USA

S4098-0019-22 10/2016

www.simplex-fire.com

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Features

Individually addressed and controlled multi-candela A/V (audible/visible) notification appliances provide:

- Multi-candela xenon strobe with synchronized 1 Hz flash rate and with intensity *programmable from the control panel* or jumper selected as 15, 30, 75, or 110 cd
- Advanced addressable notification controlled by **IDNAC SLCs** providing **regulated 29 VDC** allowing strobes to operate with lower current even under battery backup
- Wiring supervision to each strobe allowing “T-tapped” connections for Class B circuits to simplify wiring (Class A circuits require in/out wiring)
- **TrueAlert Device Reports** at the control panel detailing appliance point ID, custom label, type, and candela setting (see sample on page 2)
- **Magnet test diagnostics** to assist checkout and testing of appliances and wiring
- Compatibility with ADA requirements
- Compatibility with legacy TrueAlert addressable systems for upgrade and replacement (see page 4)
- Strobe operation listed to UL Standard 1971 and ULC Standard S526
- Horn operation listed to UL Standard 464 and ULC Standard S525

LED indicator and magnet test feature:

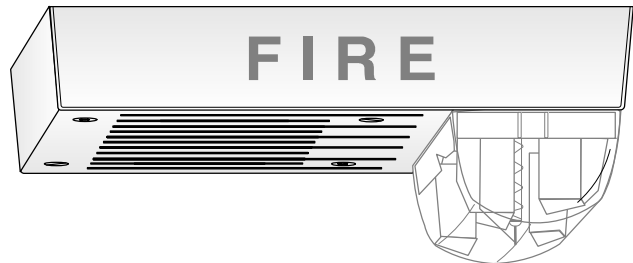
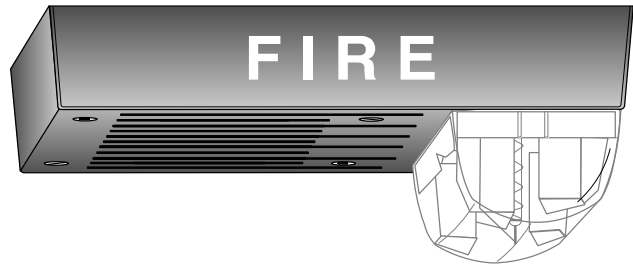
- Appliance LED can be selected to display each polling cycle to indicate appliance supervision
- In diagnostic mode, the magnet test pulses the LED to indicate appliance address **AND pulses to indicate the intensity selection**; a brief output of the strobe and the horn is also selectable to confirm operation

Mechanical design features:

- Rugged, high impact, flame retardant thermoplastic housings are available in red or white
- Rear of housing does not extend into box and easily mounts to standard electrical boxes
- Mounting options include red wire guards and adapters for surface mount electrical boxes

Audible notification appliance (horn):

- Low current electronic horn with harmonically rich output sound for either coded or steady operation
- Horns sound as Temporal or March Time pattern (60 or 120 BPM), or on continuously, controlled separately from visible appliances on the same two-wire circuit
- Output is “high” or “low” (~5 dBA difference); IDNAC SLC control selects output per device



Ceiling Mount Addressable A/Vs

Description

Multi-Candela TrueAlert addressable A/Vs provide convenient installation to standard electrical boxes. Operation is individually addressed and individually controlled with power, supervision, and control supplied from a Simplex fire alarm control panel providing **IDNAC Signaling Line Circuits (SLCs)**. (See compatibility list on page 3.)

Strobe Application Reference

Proper selection of visible notification is dependent on occupancy, location, local codes, and proper applications of: the *National Fire Alarm and Signaling Code* (NFPA 72), ANSI A117.1; the appropriate model building code: BOCA, ICBO, or SBCCI; and the application guidelines of the Americans with Disabilities Act (ADA).

IDNAC SLC Operation Advantage

TrueAlert A/V Addressable Appliances on IDNAC SLCs provide audible and visible notification using a single two-wire circuit that also *confirms connection to the individual notification appliance’s electronic circuit*. This operation increases circuit supervision integrity by providing supervision that extends beyond the appliance wiring connections.

* See page 2 for wire guard listings. 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 7125-0026:239 for allowable values and/or conditions concerning material presented in this document. 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.

IDNAC SLC Operation Advantage (Cont'd)

Reduced current allows efficient IDNAC SLC operation. With *IDNAC SLCs*, a *constant* 29 VDC source voltage is maintained, even during battery standby, 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 wiring distances up to 2 to 3 times farther than with conventional notification, or support for more appliances per IDNAC SLC, or use of smaller gauge wiring, or combinations of these benefits, all providing installation and maintenance savings with high assurance that appliances that operate during normal system testing will operate during worst case alarm conditions.

Reducing Installation and Testing Time. With separate controls on the same two-wire 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. Use of the magnet test feature improves installation efficiency. TrueAlert device reports conveniently identify information about each connected appliance.

Product Selection

Multi-Candela Ceiling Mount Addressable A/Vs

| Model | Housing Color | "FIRE" Lettering | Description | Dimensions |
|-----------|---------------|------------------|---|--|
| 4906-9228 | Red | White | Addressable Horn with Multi-Candela Strobe; intensity selectable as: 15, 30, 75, or 110 candela | 4 3/4" L" x 6 7/8" W x 2 5/8" D (121 mm x 175 mm x 67 mm) |
| 4906-9230 | White | Red | | |

Wire Guards and Ceiling Mount A/V Adapter

| Model | Description | | Dimensions |
|------------|---|---|---|
| 4905-9927* | Red Wire Guard for mounting to flush mounted electrical box | | 8 1/2" x 6 1/8" x 3" (216 mm x 156 mm x 76 mm) |
| 4905-9928* | Red Adapter Plate, required for surface mount guard | | 9" x 7" (229 mm x 178 mm) |
| 4905-9915 | White | Surface Mount Adapter Box Extension, use to cover 1-1/2" deep surface mounted boxes | 4 3/4" x 6 7/8" x 1 1/2" deep, (121 mm x 175 mm x 38 mm) |
| 4905-9916 | Red | | |

* UL listed by Space Age Electronics Inc.

TrueAlert Addressable Wiring Isolator

Isolator Model 4905-9929 is available for remote mounting on TrueAlert addressable circuits to isolate short circuited wiring from functioning wiring. (Refer to data sheet S4905-0001 for additional information.)

TrueAlert Addressable Diagnostics

Test Features. Controllers can be selected to pulse each appliance's LED when it receives a supervision poll. When the controller is selected for diagnostic mode, the appliance magnet test feature provides a response at the individual appliance being tested.

Silent Appliance Magnet Test. In this test mode, in response to the magnet test, the appliance LED pulses sequentially to conveniently indicate the appliance's address.

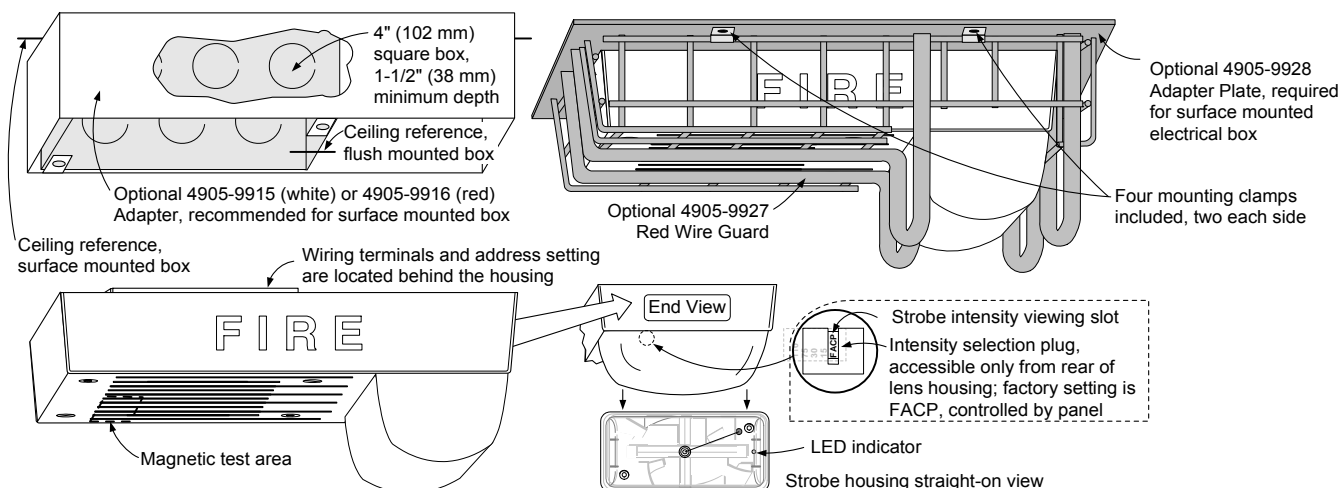
Operational Appliance Testing. In this test mode, after the address is indicated by pulsing the appliance LED, the strobe will briefly flash and the horn will briefly sound to indicate proper operation.

TrueStart Instrument Two (TSIT). The 2nd generation of the Simplex TrueStart Test Instrument adds testing of IDNAC SLC wiring and TrueAlert (and TrueAlert ES) appliances to its ability to test IDCs, NACs, and IDNet communications *before connection to the control panel*. Please contact your local Simplex representative for additional information.

TrueAlert Device Reports Reference

| Service Port | | DEVICE | | Page 1 |
|--------------|--|--------|---------|--------------------------|
| POINT ID | CUSTOM LABEL | TYPE | CANDELA | |
| REPORT 5 | : TrueAlert Device Report | | | 12:34:56am TUE 27-Jan-15 |
| T14-1-1 | Location Label . . . up to 40 characters | V/O | 15 | |
| T14-1-2 | Break Room 5 | A/V | 110 | |
| T14-1-3 | Boiler Room | A/V | 75 | |
| T14-1-4 | Elec. Room 7 | A/V | 30 | |

Ceiling Mount AV and Guard Installation Reference



IDNAC SLC Controller Compatibility Reference

| Compatible Controllers | Data Sheet Reference | Controller Output | IDNAC SLC Output Voltage | Appliance Voltage Design Reference |
|--|----------------------|-------------------|--------------------------|------------------------------------|
| 4100ES with EPS+ or EPS Power Supply | S4100-0100 | IDNAC SLC | 29 VDC (regulated) | 23 VDC (with 6 VDC drop) |
| 4009 IDNAC Repeater | S4009-0004 | | | |
| 4007ES with IDNAC Notification | S4007-0002 | | | |
| 4010ES with ESS Enhanced System Supply | S4010-0011 | | | |

Specifications

General Specifications (see page 2 for dimensions)

| | |
|---------------|--|
| Environmental | 32° to 122° F (0° to 50° C); 10% to 93%, non-condensing at 100° F (38° C) |
| Connections | Terminal blocks for 18 AWG to 12 AWG (0.82 mm ² to 3.31 mm ²); two wires per terminal for in/out wiring |
| Reference | Installation Instructions 579-808 |

Electrical Specifications

| | | | | | | | | | | |
|---|--|-------|----------|----------|----------|----------|--------|--------|--------|-----|
| Typical Operating Voltage Range | 23 VDC to 31 VDC, Special Application (see page 4 for 17 VDC rating) | | | | | | | | | |
| Supervisory Requirements | 1 unit load (= 0.8 mA control panel current) | | | | | | | | | |
| Flash Rate and Synchronized SLC Loading | 1 Hz; with up to 46 synchronized strobes maximum per NAC | | | | | | | | | |
| | Candela Setting | | 15 cd | | 30 cd | | 75 cd | | 110 cd | |
| | Horn Output Selection | | High | Low | High | Low | High | Low | High | Low |
| 23 VDC RMS Current Ratings, for connection to IDNAC Addressable SLCs, horn steady on | 75 mA | 70 mA | 110 mA | 105 mA | 198 mA | 193 mA | 250 mA | 245 mA | | |
| Horn Output Characteristics | 2400 to 3700 Hz sweep, modulated at 120 Hz rate | | | | | | | | | |
| | Sound Type (see Note) | | Steady | | | | Coded | | | |
| | Setting | | High | Low | High | Low | High | Low | High | Low |
| Horn Output Ratings @ 10 ft (3 m) | Reverberant Chamber, UL 464 Test | | 84.6 dBA | 79.1 dBA | 80.6 dBA | 75.5 dBA | | | | |
| | Anechoic Chamber | | 90 dBA | 84 dBA | 86 dBA | 80 dBA | | | | |

Note: Coded horn values are typical of the output measured with a Temporal or March Time pattern and with a sound level meter reading on a "fast" setting. Under the same test conditions, coded horn output "peak" sound level readings are typically 4 dBA higher.

TrueAlert Strobe LEGACY Compatibility Reference

| Compatible Controller | Data Sheet Reference | Controller Output | Available Strobe Intensity | Appliance Voltage Minimum |
|---|----------------------|---------------------------|----------------------------|---------------------------|
| 4100ES or 4100U with TrueAlert Power Supply | S4100-0031 | TrueAlert Addressable SLC | 15, 30, 75, and 110 cd | <u>17 VDC</u> |
| 4009 TPS, Remote TrueAlert Power Supply | S4100-0037 | | | |
| TrueAlert Addressable Controller (4009T) | S4009-0003 | | | |

Electrical Ratings Difference for Retrofit Applications

| Voltage Range | 17 VDC to 31 VDC, Special Application | | | | | | | |
|---|---------------------------------------|-------|-------|--------|--------|--------|--------|--------|
| Candela Setting | 15 cd | | 30 cd | | 75 cd | | 110 cd | |
| Horn Output Selection | High | Low | High | Low | High | Low | High | Low |
| 17 VDC RMS Current Ratings, use when connected to TrueAlert Addressable SLCs per above | 82 mA | 77 mA | 135 A | 130 mA | 249 mA | 244 mA | 335 mA | 330 mA |

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