

Product Family Brochure

Fire detection and alarm

High level integration

Networking and control

Integrated digital voice alarm

Non alarm audio

Background music and paging

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Simplex Solutions for All Markets

- Education
- Oil and Gas
- Health Care
- Government
- Retail
- Commercial
- Skyscrapers
- Transportation
- Hospitality





Simplex 4007ES

Small fire panel, big protection.



The Simplex 4007ES brings big-panel advantages to smaller facilities, offering advanced features that include TrueAlert ES addressable technology and a colour touchscreen display.

With a streamlined design, compact footprint, and unprecedented flexibility for a small panel, the Simplex 4007ES is a powerful solution for a wide variety of projects that can include:

- Schools
- Small- to mid-size office buildings
- Libraries
- Retail shops
- Small healthcare facilities
- Easy touchscreen operation

A 4.3" (10.9 cm) colour touch screen display and intuitive, menu-driven interface make the Simplex 4007ES remarkably easy to use. You can quickly access detailed information, view reports, and perform a variety of operations.

Addressable panel versions are compatible with TrueAlert ES addressable notification appliances and their revolutionary self-test capability. See pages 34 and 35 for more information on groundbreaking TrueAlert ES technology.

Smooth installation

Fully addressable Simplex 4007ES panels can integrate seamlessly with addressable devices and appliances, and offer a flexible wiring infrastructure to help make installation faster, easier, and more cost effective. The Simplex 4007ES Hybrid panel supports conventional notification appliances and is compatible with both addressable and conventional initiating devices, so it can be ideal for retrofit and expansion projects.

The hybrid model also makes the use of existing wiring much easier through its compatibility with shielded or unshielded and twisted or untwisted wire (12 – 18 AWG). In addition, the Simplex 4007ES has programmable end of line resistor compatibility which can allow you to use the existing wiring infrastructure without having to find and replace the end of line resistors that are already installed.

Whether you're looking to install a system in a new facility, or upgrade an existing system, the Simplex 4007ES offers the advanced features and installation flexibility to deliver big protection in a small package.

Features and Benefits

- Designed for small to mid-sized buildings (up to 250 points)
- 4.3" (10.9cm) colour touchscreen for easy, intuitive operation
- Flexible wiring infrastructure to make upgrading and expanding systems easier and more cost effective
- Conveniently located USB port simplifies the transfer of panel information and programming
- Programmable End of Line Resistor configuration is designed so it's easier to retrofit existing systems and to eliminate the need to find and replace the installed resistors
- Certified for Seismic Applications
- Addressable panel models are compatible with TrueAlert ES addressable notification appliances and support revolutionary TrueAlert ES self-testing capability



The 4007ES Colour Touch Screen Annunciator, a full function, pass code protected remote user interface with key switch control.

Simplex 4010ES

Ideal for Small to Medium Facilities



Features and Benefits

- Designed for small to medium building applications
- 2GB of integrated, supervised storage for programming and system configuration information
- 4120 network compatible
- Up to 1000 points with multiple isolated loops
- Compatible with TrueAlarm sensors
- IDNet analog addressable devices
- LCD remote annunciator
- Remote 24 point I/O
- Available DACT for supervising station communications
- UL/FM listed for suppression release
- Certified for Seismic Applications
- SafeLINC fire panel internet interface
- BACnet third party interface
- 4003EC voice control panel compatible
- Compatible with TrueAlert ES addressable notification appliances and their revolutionary self-test capability. See pages 34 and 35 for more information on ground breaking TrueAlert ES technology

The Simplex 4010ES is a highly flexible and powerful 250 to 1,000-point addressable system for small to mid-sized facilities. Unlike many systems of this size, points can be used for detectors, modules or manual stations as needed to help meet the requirements of each building. The 4010ES includes labour-saving features such as device-level ground fault isolation and almost dirty smoke sensor status reports that help reduce installation time for electrical contractors and allows for proactive maintenance to be scheduled at one-time to help eliminate unwanted nuisance alarms.

4010ES panels are networkable and can be connected to other Simplex panels and TrueSite Workstation command centres. 4010ES panels are also compatible with TrueAlert ES addressable notification appliances and their revolutionary self-test capability. See pages 34 and 35 for more information on ground breaking TrueAlert ES technology.

Simplex 4003EC

Adds Digital Voice Message Capability to Non Integrated Voice Fire Alarm Panels



Features and Benefits

- Voice Evacuation
- Supervised Paging
- Telephone Messaging
- Background Music Delivery (Non-Alarm Audio)
- Compatible with Simplex 4007ES, 4010ES and third party UL864 Fire Alarm Control Panels that use conventional NACs



The impressive feature list of the powerful 4003EC panel includes extensive emergency and non-emergency paging capabilities, support for up to 18 remote microphones, and compatibility with up to 5,000 Watts of remote booster amplifiers to expand coverage area or extend it to multiple notification areas.

Simplex 4100ES

The Premier Solution for Medium to Large Facilities

The Simplex 4100ES is based on a modular architecture allowing system designers to custom configure each panel and build a cost-effective system that meets project specifications and capacity requirements. The future proof design of Simplex systems reduces cost of ownership by allowing easy expansion to accommodate changes throughout the life of the system.

Simplex systems offer true integration including voice alarm/evacuation, agency listed non-alarm paging and background music, fire fighter telephones, emergency notification, Mass Notification Systems (MNS), smoke management and control, and available high level integration to third party systems utilising open protocols. Simplex systems also feature graphic workstations with remote PC and mobile client support as well as dual redundant configurations and addressable multi-candela audible/visual appliances including our unique Simplex TrueAlert text messaging display.

Simplex UL listed textual notification appliance is designed to supplement standard notification appliances to improve life safety and addresses requirements for the hard of hearing/deaf community. Each display can also support custom non-alarm messages sent from a remote PC over a TCP/IP network which are overridden in an emergency condition such as a fire, security breach, or a hostile intruder.

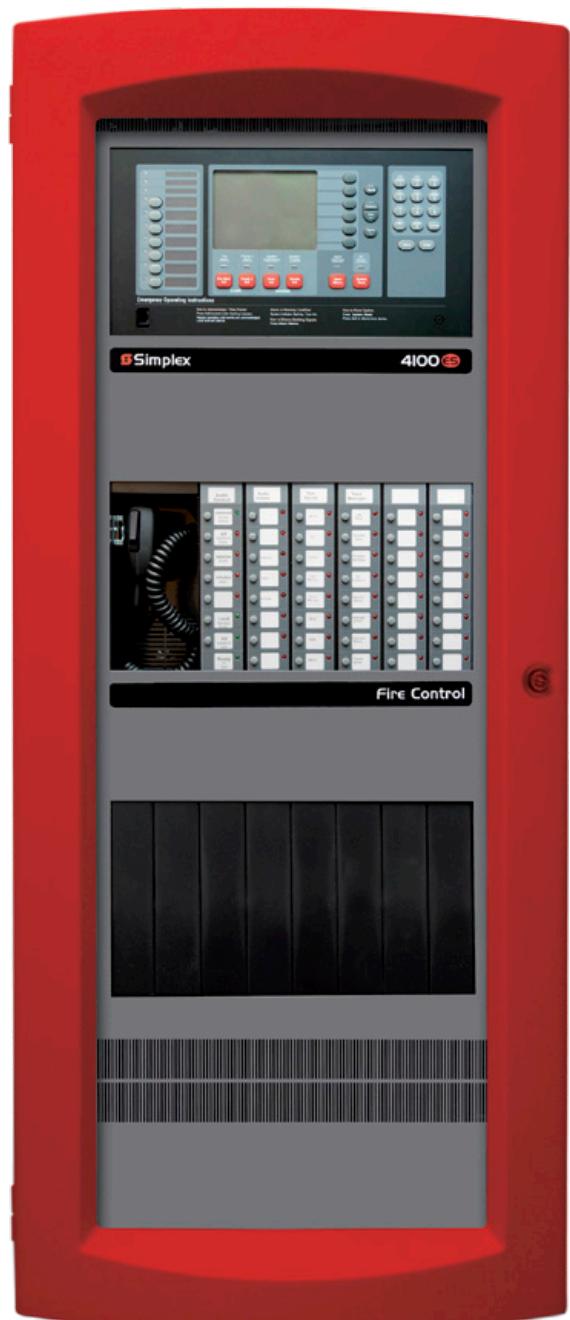
It's important that a fire detection system can continue to be serviced, supported and upgraded throughout its life in order to protect the owners investment. Simplex systems are always engineered to provide a migration path to the latest technology and features available.

Master Bay →

- 2GB of integrated, supervised storage for programming and system configuration information
- System Power Supply (SPS) with on board IDNet channel, 3 NAC's and Aux Power or Enhanced Power Supply (EPS) with dual loop IDNet 2 channel, 3 IDNAC SLC's for addressable notification and Aux Power
- CPU, Network Card, Media Cards, RS232

Expansion Bays →

- Dual redundant CPU option for critical applications
- Audio
- Firefighter phones
- Relays Cards, Zone Cards, IDNet Cards
- LED/Switch Modules
- TCP/IP Physical Bridge
- Single Fibre Modems
- Expansion Power Supplies (XPS)
- TrueAlert Addressable Power Supplies



Simplex 4100ES

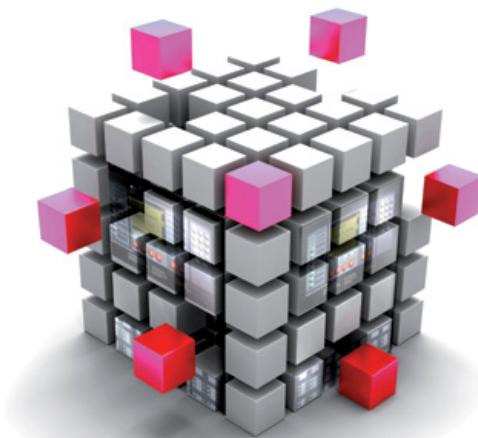
Key Features

- UL & FM approved
- Universal platform - small to large systems
- New processor with on board IP network capability
- Integrated voice alarm and fire fighter phones
- Agency listed non-alarm audio (paging and background music)
- Spoken WALKTEST
- Voice coding/message splicing
- Compatible with TrueAlert ES addressable notification appliances and their revolutionary self-test capability. See pages 34 and 35 for more information on ground breaking TrueAlert ES technology
- Smoke management and control
- High level networking, multiple topologies and connectivity options
- Network-wide synchronization of notification appliances
- Available third party open protocol interfaces
- Graphic workstation with support for remote PC and mobile clients and dual redundant configurations
- SafeLINC fire panel internet interface
- UL Listed for Mass Notification
- UL/FM listed for suppression release
- Certified for Seismic Applications
- Master clock interface

Modular Design

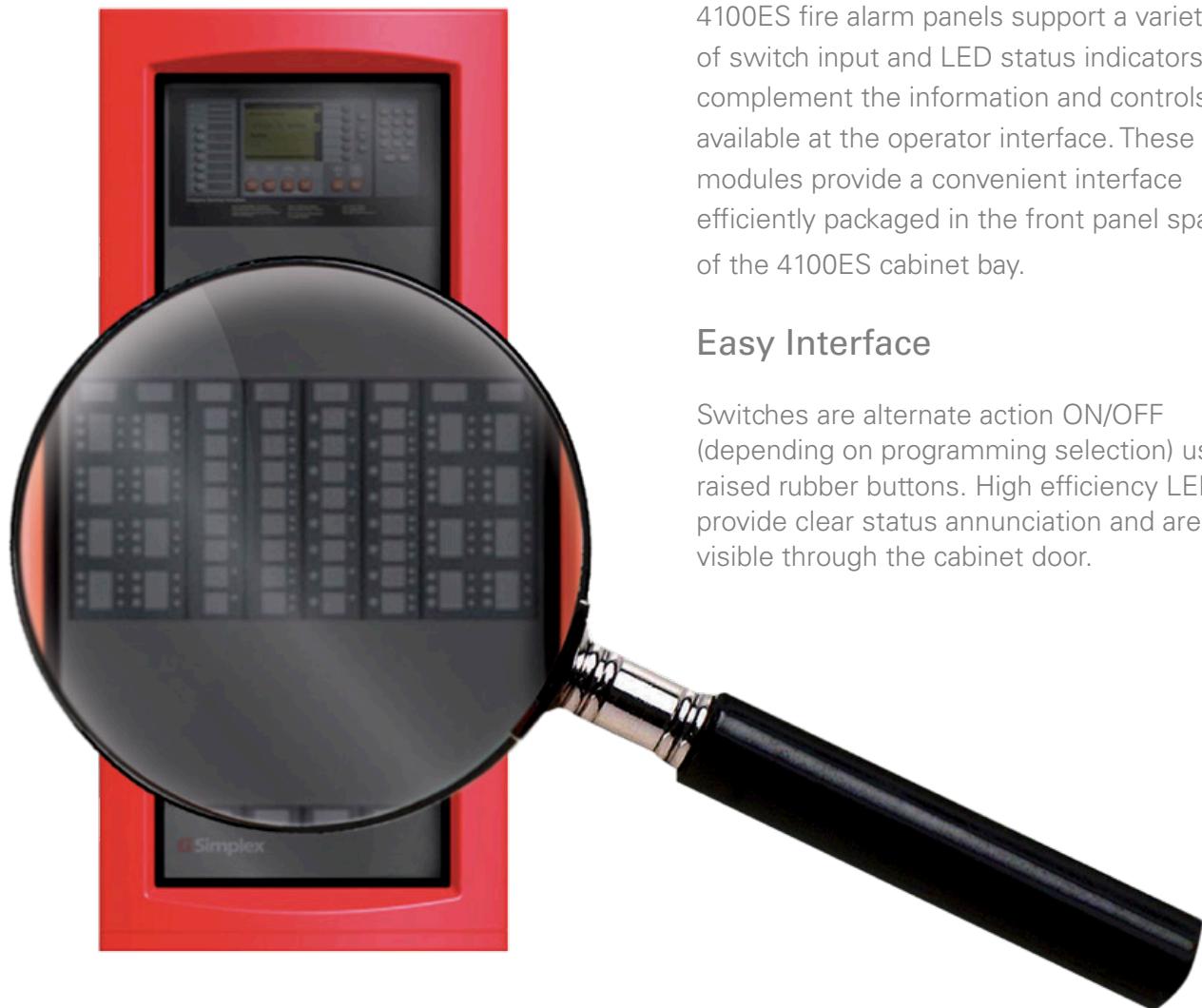


- Future proof modular design provides an upgrade path to new technologies and easier installation and programming
- Helps protect your investment
- Reduces life-cycle cost of ownership
- More efficient installation and commissioning
- Scales to fit the project



Simplex 4100ES Annunciation Modules

Switch Inputs and LED Status Indicators



4100ES fire alarm panels support a variety of switch input and LED status indicators to complement the information and controls available at the operator interface. These modules provide a convenient interface efficiently packaged in the front panel space of the 4100ES cabinet bay.

Easy Interface

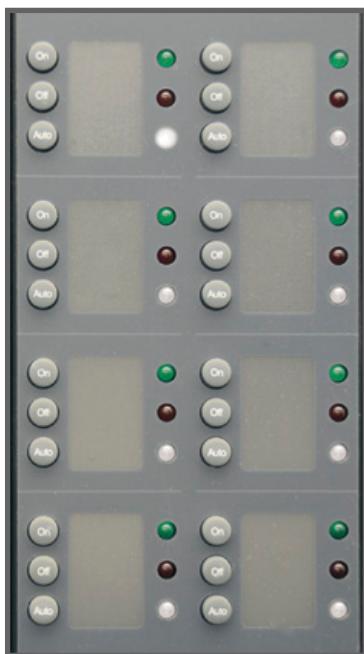
Switches are alternate action ON/OFF (depending on programming selection) using raised rubber buttons. High efficiency LEDs provide clear status annunciation and are readily visible through the cabinet door.

Selectable Functions

Switch functions and LED status indications are selected when the control panel CPU is customised for site requirements. Labels can be customised to indicate the exact function of the LEDs and switches.

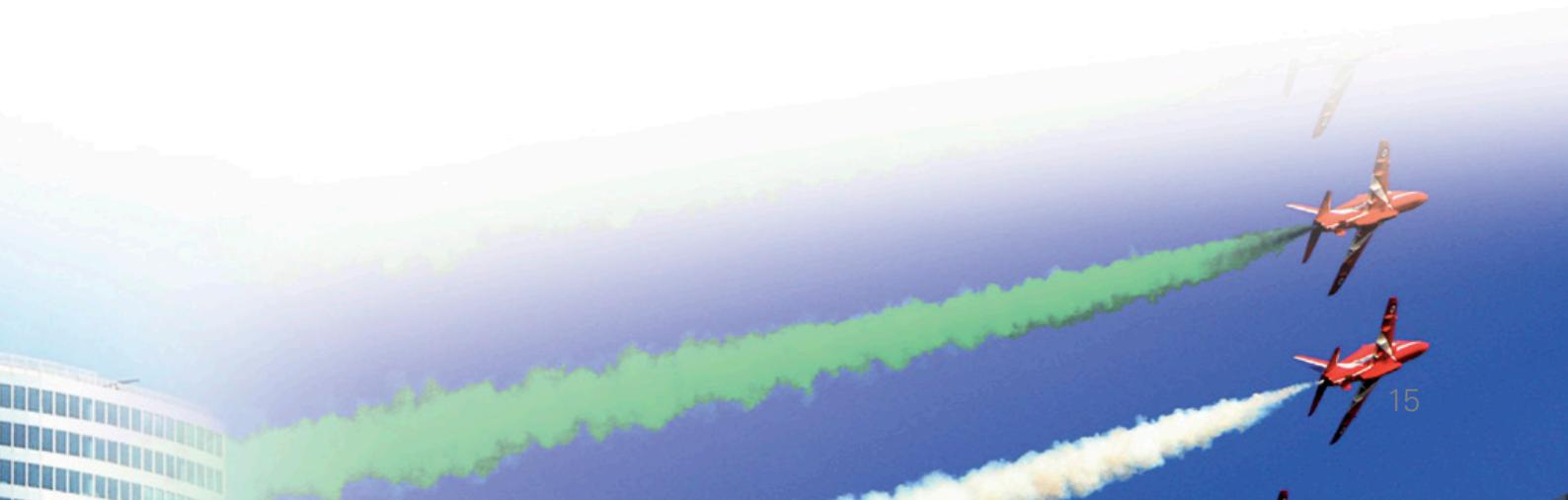
HOA Switch Module LED

The 4100ES smoke control Hand Off Auto (HOA) LED switch module provides an easy, cost effective solution for projects requiring International Building Code (IBC) compliant HVAC control and annunciation.



Smoke Control Listed and Approved

- 24 switch/24 LED (green, red, white) module
- Raised momentary switches provide tactile feedback
- Alternate switch action provides on/off functions
- High intensity green/red/white LEDs provide clear status annunciation
- Slide-in labels provide custom on-site labelling of 8 fan controls in a double slot module
- Multiple LED/switch display cards may be daisy chained together
- IBC compliant
- Replaces expensive custom annunciators/ smoke control panels.
- Mounts as part of the 4100ES panel eliminating the need for additional custom cabinets.
- Helps reduce product and installation costs increasing competitiveness in projects requiring smoke control or HVAC control functions.



Fire Alarm Networks

Building and Campus Wide Communication

Simplex Fire Alarm Networks communicate information among distributed Simplex fire alarm control panels. Systems may be composed of similar capability panels sharing information, or specific nodes may be added to perform dedicated network functions. Illustrations on the following pages provide a sample of the variety of fire alarm network applications, multiple topologies and connectivity options.

For non-Simplex panels, a network system integrator can be used to connect equipment to the network using optically isolated inputs and relay contact outputs.

Network communications among system fire alarm control panels provides:

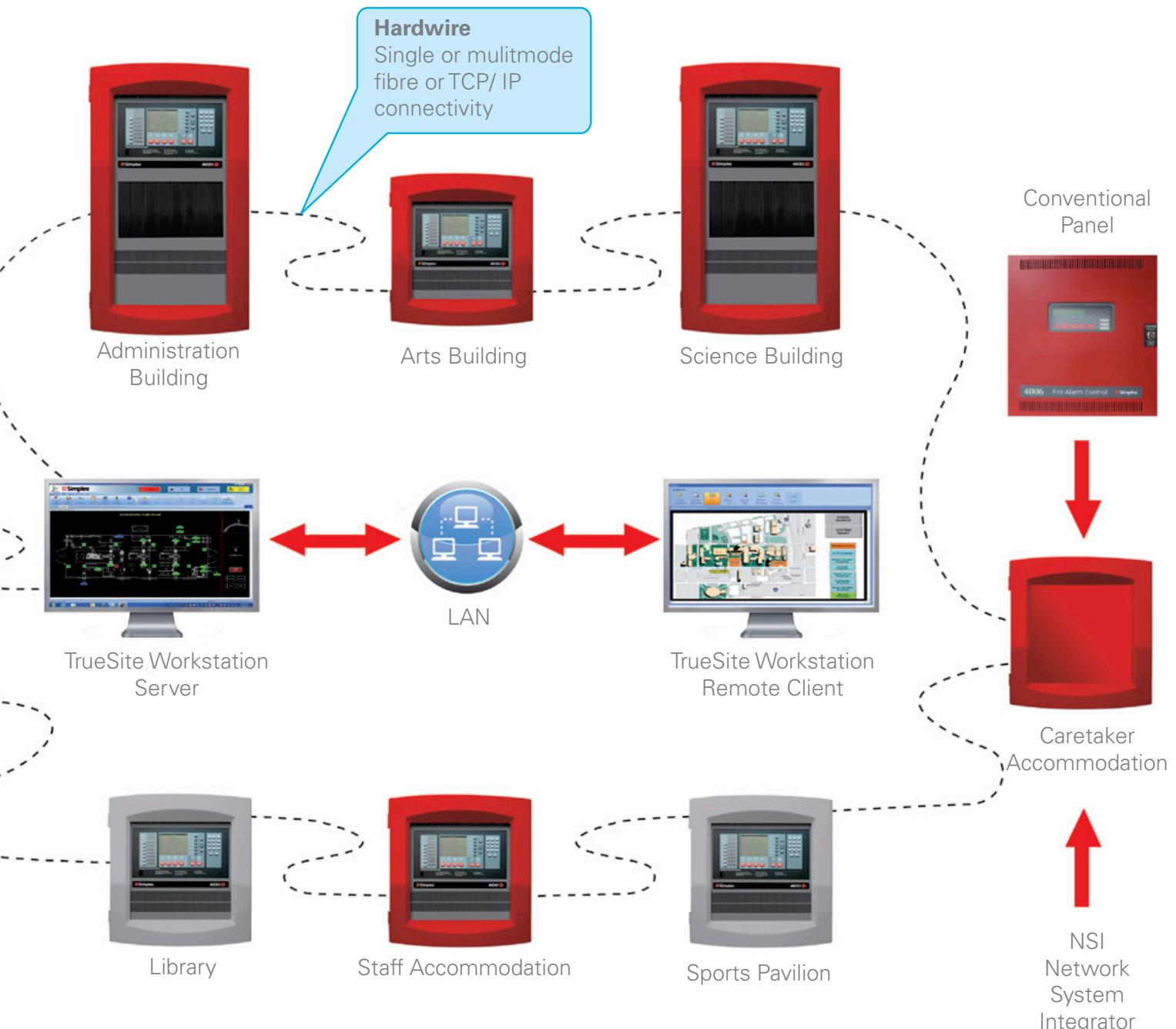
- Support for network emergency voice broadcasts and centralised command centre operations
- Multiple network loops for campus and other high panel quantity applications
- Network-wide initiation of alarm silence, acknowledge, and reset; and investigation of status and details of system points and point lists
- Network-wide synchronization of notification appliances
- Distributed system operation to ensure excellent survivability; during a communications fault condition, network nodes remaining connected will regroup and continue communicating
- Flexible network annunciator options such as, TrueSite Workstations, Network Display Units (NDU) and NDUs with Voice Command Centre
- Use of InfoAlarm Command Centre equipped nodes to provide increased network information display capability
- Network level command and control provides manual point control for on/off or disable/enable, as well as gathering specific point detail



Central Security Office Building

Simplex 4100ES

Network Voice Command Centre



Alarms (Fire & Security) / Troubles / Supervisory
Maintenance / Emergency Paging / Mass Notification / Dispatch Aid

Fire Alarm Networks

Flexible Communication Options

Communications

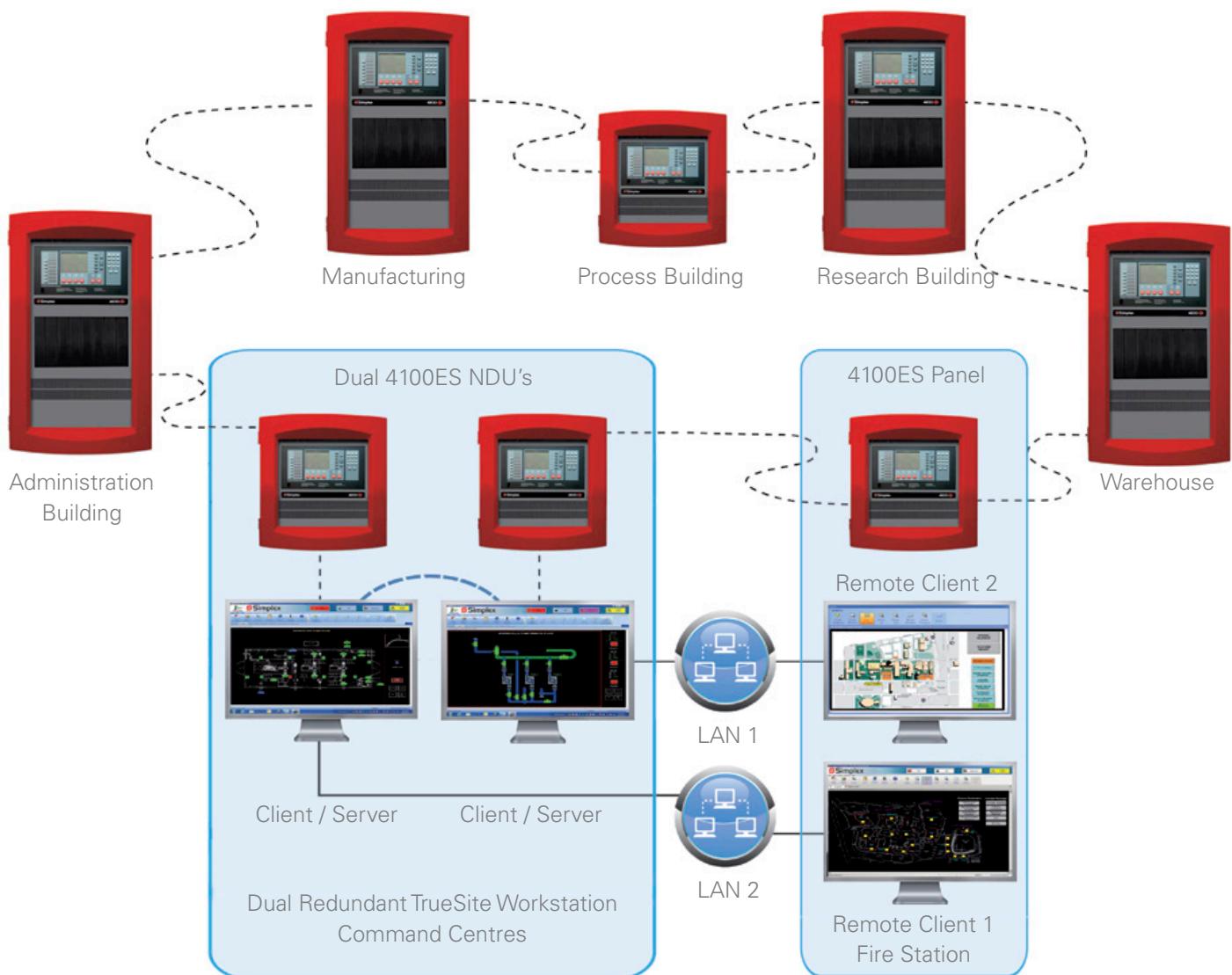
- Wired communications using a single pair between nodes
- Available fibre communications providing increased noise immunity and longer distances
- Multiple communication network fibre modules are available for either multi-mode or single mode fibre and can carry other communications such as network audio
- TCP/IP communications using a local area network (LAN) connection

Survivability

If a node goes “off-line” or if the connection between nodes shorts, opens, or has any other form of communication problem, the nodes will isolate that section of wiring. Nodes that cannot retransmit onto the next node of the network will transmit back to the previous node to maintain communications and notify the network of the node status. In the event of multiple wiring problems, the remaining nodes will effectively “regroup” and establish new, smaller “sub-networks” that will maintain communications among the active nodes.

Network diagnostics include

- Attendance and polling error logging
- LED status indications on interface board
- Synchronised time and date allowing precise data logging



Industrial System Network Example

Communications Options:

- Wired communications are compatible with a variety of new and retrofit wiring
- Supports single and multi-mode fibre network communications
- Simplex networked systems offer flexible designs of mixed topologies using a combination of any of the above connectivity options.

Panel CPU's / Fibre Network / Command Centres
/ Remote Clients / Integration

Networking & MINIPLEX

Transponders

Multi High Rise Tower Example

4100ES MINIPLEX transponders connect to a host 4100ES Fire Alarm Control Panel using Simplex Remote Unit Interface (RUI) communications. At the transponder, RUI communications are received by the transponder interface module and translated into the same internal communications format that is used in the host control panel.

Simplex MINIPLEX transponders allow systems to be intelligently distributed with remotely located modules. With RUI communications, the transponder can remotely provide the same initiating and notification functions that occur at the host control panel without requiring multiple long distance wiring runs, providing cost effective installations.

Example

The example shown has the following desired design attributes:

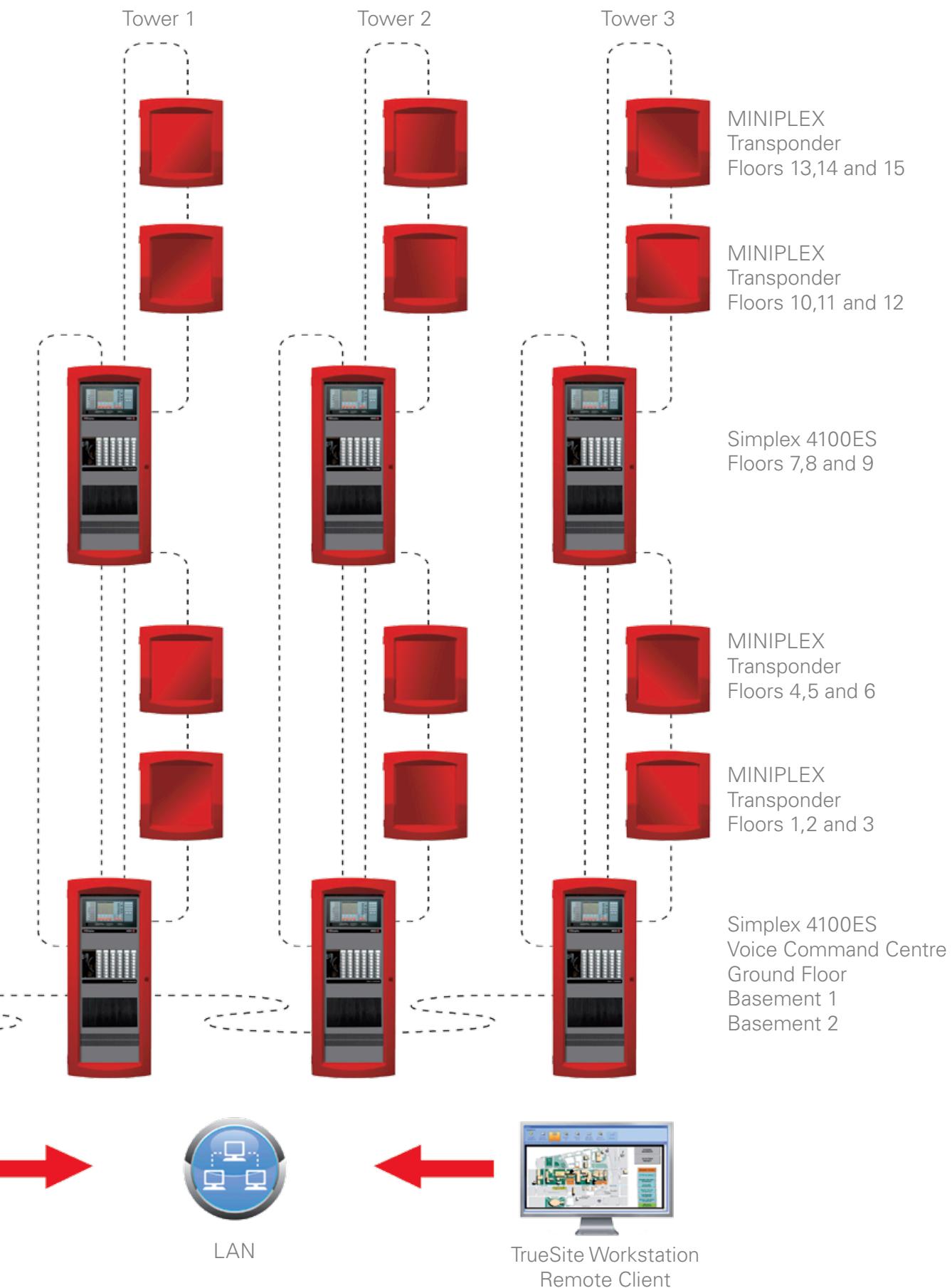
- Survivability
- Central or local operation
- Scalable
- Compatible systems simplify central controls interface operation
- Local and central paging
- Supervision
- Emergency and mass notification paging (firefighter's microphone)
- Smoke control
- Firefighter's phone communications

Simplex 4100ES
Voice Command Centre



TrueSite Workstation
Server

Networking & MINIPLEX Transponders



Emergency Voice / Alarm

Integral Digital Audio

4100ES Audio Systems

4100ES audio systems can provide voice communication, alarm tones and digitally pre-recorded voice messages to alert occupants of fire or other emergency situations. Evacuation signalling may be automatically generated via alarm initiated events or by firefighting personnel using the operator controls.

Firefighter Telephone Systems

Firefighter telephone systems provide two-way communications for facilities where radio communications may not be available or are unreliable. They are typically used during active fire fighting conditions, during a fire alarm investigation, or during fire alarm system inspection and test.

The master telephone can simultaneously talk with up to 6 remote telephones and can be connected as an audio input for broadcast messages.

A ring signal on a remote firefighter telephone indicates that a call request is initiated and a hold signal indicates that a connected line has been deselected.

Telephone circuits are supervised for open and short circuits and too many telephones connected. The master telephone is supervised for cord integrity.

Degraded mode allows remote telephones to remain connected to each other in the event of a communications loss.

"Integrated Voice Alarm Systems provide Clear Concise Instructions for safe and effective alert and evacuation procedures including unobtrusive maintenance and testing"



Emergency Voice/Alarm Communications Provide:

- Alarm/evacuation signal generation with multiple built-in tones
- Standard or customised digital message storage and message generation
- Automatic or manual operation
- Mass notification operation
- Analogue audio systems provide dual channel operation
- Digital audio systems provide multiple channels over a single wire pair
- Supervised remote microphone inputs
- Spoken voice coding from the digital message player
- Multiple digitally recorded human voice messages
- Spoken WALKTEST system testing
- Separate evacuation, drill and optional "All Clear" voice messages and tones
- Ready-to-talk microphone indicator on front panel of the audio control module
- Local panel speaker for tone/message broadcast verification
- MINIPLEX voice transponders are available for distributed audio

Non-Alarm Audio

Background Music and Paging

4100ES Audio Systems

The 4100ES is agency listed for non-alarm audio such as background music paging and mass notification. Facility owners and managers are often looking for ways to reduce hardware space requirements and costs without compromising on power or performance. Combining evacuation and non-alarm audio function such as paging into a single system can meet these needs.

As voice alarm systems are typically designed to meet the audibility and speech intelligibility requirements of project specifications, fire detection standards and local building codes, they are often also suited to public address and paging. This can eliminate the need for two separate systems.

A single speaker system can provide a lower system cost and reduce installation/commission time. In addition, utilising the fire alarm system for paging increases familiarity with the controls and helps reinforce operator training.

Constant Supervision

When non-alarm audio applications (such as for background music, paging, or for Mass Notification) are required, optional Constant Supervision modules provide continued speaker zone supervision during the page or while background music is playing.





4100ES Voice coding and message splicing

Zone coded signalling is available using tones or spoken numbers. Spoken coded messages can be used in place of conventional pulse tone coding to eliminate counting and interpretation of the zone coded location.

For example, a fire alarm zone such as First Floor East, Smoke Detector Room 23 will be Code 1123.

Two possible transmission schemes are:

1. Conventional zone coded signalling where
T = Tone: T...T...TT...TTT...T...T...TT...TTT...
2. Spoken coded signalling:
Code, one..one..two..three;
Code, one..one..two..three

The audio controller has the ability to precede spoken codes with phrases and alert tones. As an alternative, the previous example could have been preceded with a chime tone. The word "code" could be replaced with the phrase.

"Doctor Firestone, please dial...."

Pre-programmed special messages or phrases can be provided to meet specific custom applications requirements.

The standard evacuation message is:

"Attention... Attention...Attention...An emergency has been reported.... All occupants walk to the nearest stairway exit and walk down to your assigned re-entry floor or main lobby... Do not use the elevator... Walk to the nearest stairway.... Do not use the elevator.... Walk to the nearest stairway."

SafeLINC

Fire Panel Internet Interface

Secure Fire Panel Access via the Internet

The SafeLINC Internet interface provides access to fire alarm system information using the familiar interface of a standard Internet browser. A remotely located fire professional can use this access to analyse control panel status during non-alarm conditions and can also use this information to assist local fire responders during alarm conditions.

SafeLINC Fire Panel Internet Interface (FPII) enables investigation of fire alarm control panel status using the familiar interface of an internet browser:

- Intuitive menu screens are refreshed automatically with the occurrence of new events
- Support is for up to 50 user accounts with up to five simultaneous users
- Intuitive menu screens
- Annunciation and reporting capacity up to 12,000 points
- Supports either DHCP or static IP addresses
- Compatible with Microsoft Internet Explorer Firefox, Safari, and Chrome web browsers
- Listed to UL Standard 864 and ULC Standard S527

Security access features

- Supports Secure HTTPS/SSL Connections
- Multiple user accounts and passwords (similar to the host control panel)
- Programmable lockout to prevent excessive login attempts by unauthorised users

Fire Alarm Control Panel model compatibility

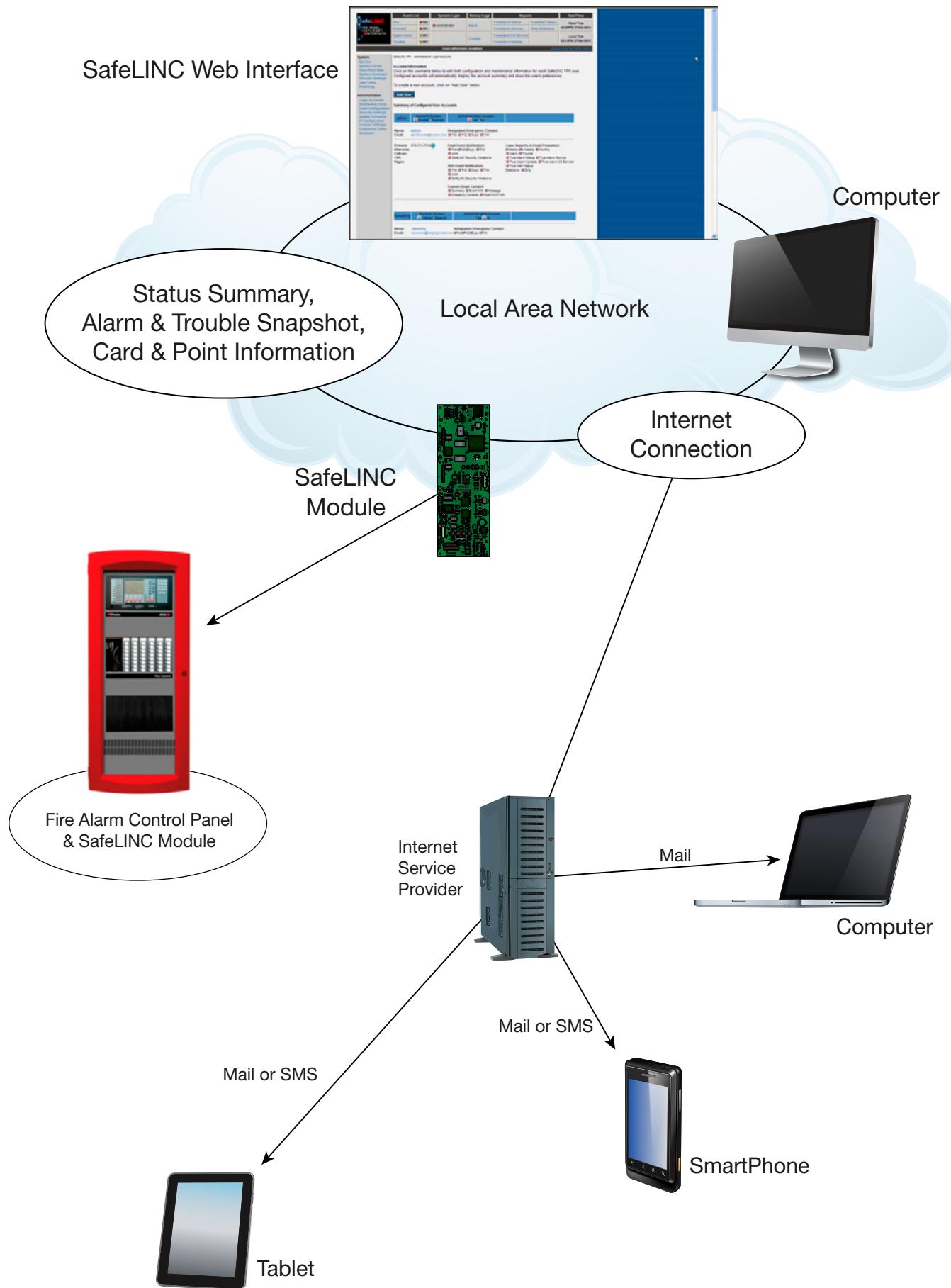
Compatible with 4100ES, 4010ES; and 4100U at revision 12.06 or higher

Automatic or scheduled e-mail feature provides selectable notification to user accounts:

- Built-in e-mail feature can notify users of individually selected status changes either automatically or as scheduled
- Compatible email services include: local SMTP email servers, ISP provided email service, and Internet email service
- Email capacity includes addresses for the 50 user accounts and up to 5 separate email distribution lists with each supporting up to 20 additional email addresses
- With 4100ES, 4100U, or 4010ES control, action messages can be sent to email distribution lists for Emergency Communication System (ECS) operation (see details on pages 3 and 4)
- Information can be alarm, priority 2, supervisory, trouble; or system history logs and panel reports
- Compatible pagers, cell phones, or Personal Digital Assistants can receive direct email messages or messages forwarded from a user account

Available information

- Alarm, priority 2 alarm, supervisory, trouble counts and status messages
- Detailed point information accessible similar to that available at the panel
- TrueAlarm sensor status including service and status reports
- System history logs and panel reports



BACpac Ethernet Module

4100ES Fire Control Panel

The 4100-6069 BACpac ethernet module provides a supplementary communications interface that converts computer terminal information from a compatible Simplex fire alarm control panel into BACnet building automation protocol. With this module, status information from the fire alarm control panel can be provided to other components of the building automation network with the detail and information format required.

This information allows other systems to properly respond to fire alarm system activity and supplement the primary fire alarm response that is under the control of the fire alarm control panel.

Systems Responsibilities

Fire detection and alarm systems are distributed throughout buildings to monitor for the presence of smoke or fire. When a fire alarm condition is determined, the fire alarm system communicates that information with sufficient detail to allow the proper fire response to begin. The fire alarm system may perform other control functions such as fan shutdown and elevator recall, or those actions may be performed by other systems that handle those functions for normal conditions as well as for abnormal conditions.

Building Automation Systems

As buildings increase in size and complexity, control of the electrical and mechanical systems requires coordination. This process has evolved into the general category of Building Systems.

Automation and includes systems such as heating, ventilation, and air conditioning (HVAC), elevator controls, security controls, lighting controls, and other similar building functions.

Typical responses to fire alarm system status changes might include: HVAC fan control operation, elevator capture, lighting control, and security system awareness.

Specific examples could include turning on lighting where needed, aiming security cameras on specific areas, providing door release, and implementing detailed fan exhaust and/or pressurisation instructions.



IDNet

Hard Addressing Loop Protocol

The first job of any sensor is to help you protect your people and operations. The second is to reduce nuisance alarms, which could cause disruption to building occupants and operations. Simplex's patented TrueAlarm technology addresses the major causes of nuisance alarms: dirty sensors that result in overly-sensitive devices.

Drift compensation-

Sensors evaluate environmental data and compensate for contamination to maintain detector sensitivity and improve nuisance alarm immunity.

Seven UL approved sensitivity levels-

Each sensor can be set at the optimum sensitivity for the environment it protects, right down to 0.2%. Sensitivity levels are selected from one of the widest sensitivity ranges in the industry, providing notable differences in response time.

Peak value logging-

Provides historical accounting of how close each sensor has come to its alarm point, allowing you to more accurately set your system for maximum sensitivity without triggering nuisance alarms.

Automatic sensor cleaning indication-

Warns system operators that a sensor is dirty before its drift compensation level has been reached, which could cause unnecessary alarms.





MX Digital

Flexible Robust and Reliable Protocol

Soft addressing

Loop powered sounders

MX Fastlogic

MX Fastlogic sensor operation is an algorithm that takes into account the pattern of smoke build up over time and applies fuzzy logic to calculate the level of risk. This algorithm uses over 200 years of fire test data from research at the University of Duisburg (Duisburg, Germany) to determine the likelihood that there is a real fire and is designed to achieve faster detection of real fires and slower (preferably no detection) of false alarm sources.

MX Fastlogic Basics MX Fastlogic can be described as an Expert algorithm since it uses real fire data as a basis for the alarm decision. For any given application we are obliged to employ the most suitable detection in terms of response to an actual fire while minimising false alarms. This general requirement is clearly reflected in local and national standards governing fire detection system designs.
MX Fastlogic - Principle Elements Several elements of the detector output are monitored and this raw data is used by MX Fastlogic to execute a series of processes to evaluate the probable presence of fire including:

- Background filtering
- Instantaneous smoke density
- Rate of change of smoke density
- Smoke density weighting
- Smoke density peak suppression
- Real fire experience comparison

Traditionally, attempts at reducing the occurrence of false alarms have involved degrading the level of fire protection afforded, either by raising the alarm threshold of smoke detectors, introducing delays, or generally employing less responsive detection.

MX Fastlogic gives us the opportunity to offer an improved level of protection while simultaneously increasing immunity to false alarm.

Elements synonymous with false alarms are filtered while those elements indicative of fire are weighted. These results are continually compared against data derived from real fires to produce a measure of fire risk. It is against this risk measurement that the decision to alarm is made.

MX Fastlogic is designed to maintain sensitivity to fire while minimising false alarms. Many analog detection systems allow the user to select different smoke detector sensitivity settings e.g. high, normal, or low sensitivity. Lowering the sensitivity setting is a typical reaction to unwanted alarms but it usually means that a greater density of smoke is required to initiate an alarm.

This is not the case for detectors using MX Fastlogic which is comparing the real fire experience against recognised fire patterns. Changing sensitivity from 'Normal' to 'Low' for example, would delay responses to less likely fire patterns whilst maintaining a normal response to more likely fire patterns. The net result is a reduced sensitivity to possible false alarms without reducing sensitivity to clearly identifiable fires.



Simplex 4100 ES

TrueAlert ES

Addressable Notification



Simplex TrueAlert ES is a new family of intelligent, addressable notification appliances that delivers:

- Individual device identification and addressability
- Unparalleled system design and installation flexibility
- Lower costs through more efficient use of wire and power
- Revolutionary self-test capability

TrueAlert ES addressable technology allows each appliance to be individually identified and supervised by the fire alarm control panel, ensuring device disconnections or failures are quickly detected and reported. Addressability also allows key properties like the device candela rating and tone pattern to be set right from the fire alarm panel.

With TrueAlert ES we have also changed the way we power and wire the notification appliances. The result is that you can go further and connect more appliances to your circuits – all while using smaller gauge, unshielded wire.

And because the devices are addressable, you control zones and alarm responses through software, not wiring. So, your wire runs are more efficient, and easier to install and modify.

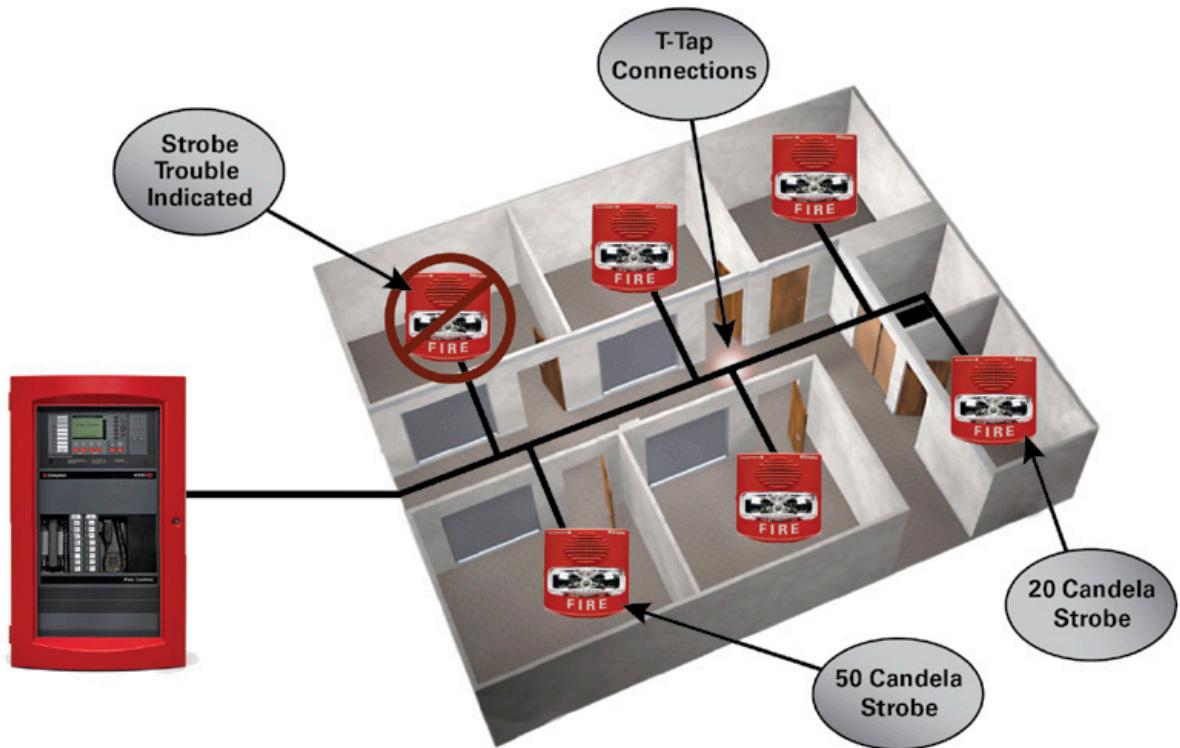
Easier Design

It's easier for engineers to design systems using TrueAlert ES devices. Highly flexible and forgiving wiring architecture means fewer rules to follow and less chance of design roadblocks. TrueAlert ES systems are also highly scalable. They are easy to expand and can grow right along with the facility.

Faster, More Efficient Installation

TrueAlert ES appliances use unshielded wire and support T-Tap installation. Superior use of power allows more appliances to be connected per circuit and circuits can support longer wire runs. In addition, in many cases TrueAlert ES devices can be installed using smaller gauge wiring. Less wiring, thinner cables, T-Tap architecture, and fewer power supplies mean that installation time and costs can be significantly reduced.

TrueAlert ES Addressable Notification



Enhanced Protection

Addressable technology gives TrueAlert ES notification appliances the intelligence to report their location and status to a Simplex 4007ES, 4010ES, or 4100ES fire alarm control panels.

The appliances are electronically supervised 24 hours a day, 7 days a week by the fire alarm control panel and warn you with specific alerts when repair or maintenance is needed. This gives facility managers and system operators the confidence of knowing their notification appliances are operational and ready to perform in an emergency.

Appliances that Test Themselves

TrueAlert ES appliances are equipped with built-in light and sound sensors that enable the fire alarm control panel to detect the operation of the strobe and sounder and confirm whether the devices operated properly. Testing is simple and quick, which means it can be done any time, day or night, without disrupting building occupants or operations.

TrueAlert ES Fast Facts:

- Appliances are supervised by the fire alarm control panel
- TrueAlert ES systems are typically easier to design, have less complex wiring, and can evolve with the life-safety needs of the facility
- Higher efficiency and reduced power use means more appliances per circuit, smaller gauge, unshielded wiring and faster installation
- Test appliances any time day or night and without disrupting building occupants
- Appliance information and test history is stored and can be retrieved for reporting to code compliance officials

TrueAlert ES 5900 Series

Smaller design with bigger energy savings

Advanced LED technology and a streamlined design make TrueAlert ES 5900 Series appliances smaller, more energy efficient and less obtrusive than other appliances. With a decreased footprint and a lower profile, TrueAlert ES 5900 Series appliances blend into the environment and are only really noticed when they need to be – in an emergency. And, because they are part of the TrueAlert ES family of addressable appliances, the 5900 Series features revolutionary self-test capability that helps reduce testing costs and ensure systems stay in top working order.

Advanced LED Technology

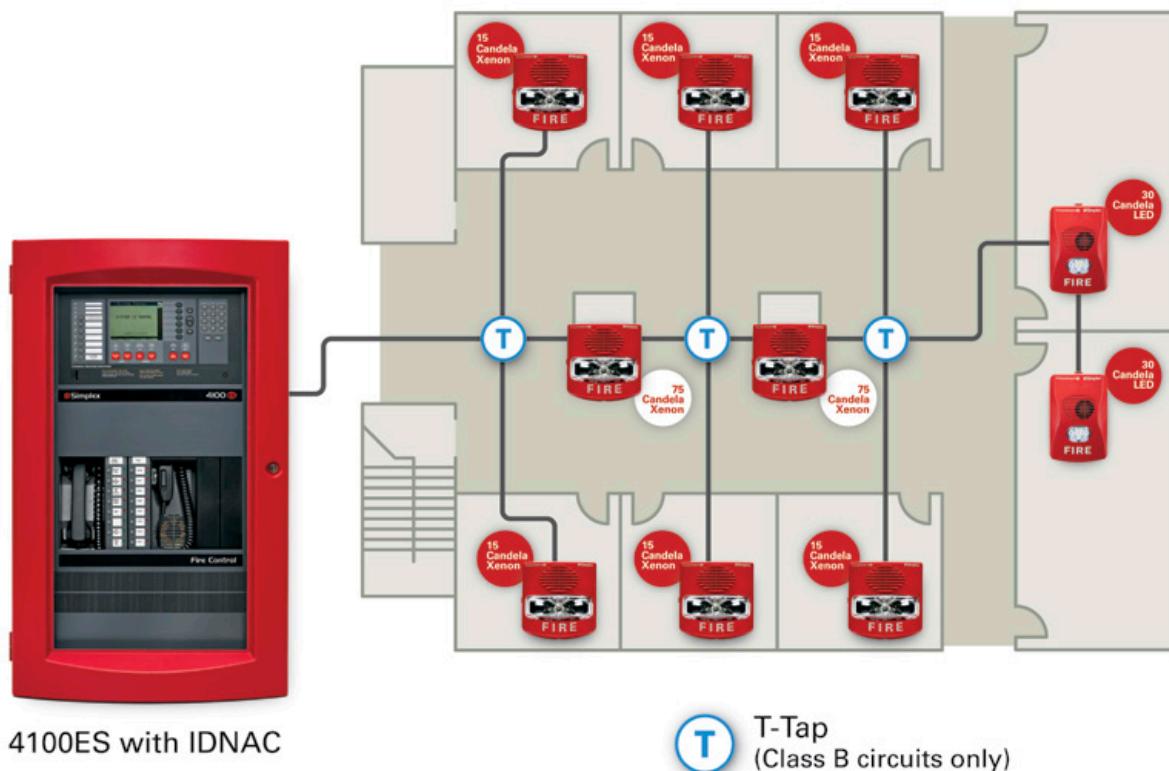
To deliver a smaller appliance and bigger energy savings, SIMPLEX has incorporated advanced power saving LED technology into the design of TrueAlert ES 5900 Series appliances. Decreased power consumption per appliance means you can connect more appliances to each power supply on your system. It also means it's possible to design systems with more appliances per circuit and with more efficient circuits that use smaller gauge wire, go further and use fewer batteries. All together, these capabilities can translate to less material cost, reduced labour time, and more savings.



5900 Series appliances are UL and ULC listed and FM approved. 5900 Series appliances are also UL listed for synchronisation with TrueAlert ES addressable appliances with Xenon strobes. Both appliances can be used together on or across the same circuits.

You can also count on 5900 series appliances to help you comply with the latest code requirements. The 2016 edition of NFPA 72 calls for LED strobes to flash using a pulse width of no more than 20ms. The 5900 series appliances meet this requirement, so you can install them with confidence.

Synchronises with Non-LED Appliances on the same circuit



TrueAlert

Text Messaging Appliance

Visual Alarm and Emergency Notification



Audible appliances and strobes are commonly used to provide notification of alarm conditions and to signal the need for building evacuation. However, when the required response is to relocate, defend in place, or provide detailed information, TrueAlert text messaging appliances are the answer. These flexible, programmable devices display custom text messages with the instructions required by the local emergency communication systems/mass notification plan.

Alarm Mode

When alarm conditions occur, the fire alarm panel overrides optional non-alarm messaging and selects the programmed messages appropriate for the reported conditions. In multiple alarm situations, up to 8 messages can be displayed in sequence.

Non-Alarm Mode (Optional)

During non-alarm conditions, bulletin board messages can be scrolled for general information distribution. This information is communicated to the messaging appliance via LAN (local area network) connection using TrueAlert messenger software.

Synchronised Time and Date

The appliance can also be synchronised with an NTP time server to display the time and date.

Power Failure Mode

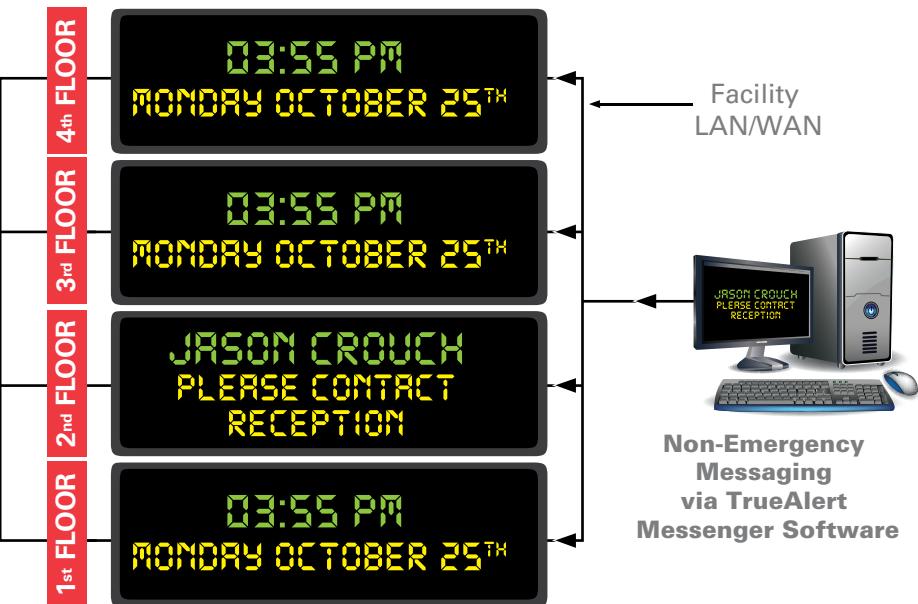
The host fire alarm panel can be programmed such that during a local power failure, a blinking message is sent to the text messaging appliance to reduce battery standby requirements. In the event of an alarm condition during power failure, the panel will use its batteries back-up to fully power the appliance and display the appropriate messages.

System normal non-alarm messaging time and date display available

Text Messaging
Appliances are powered by the fire alarm control panel



Simplex 4100ES Control Panel

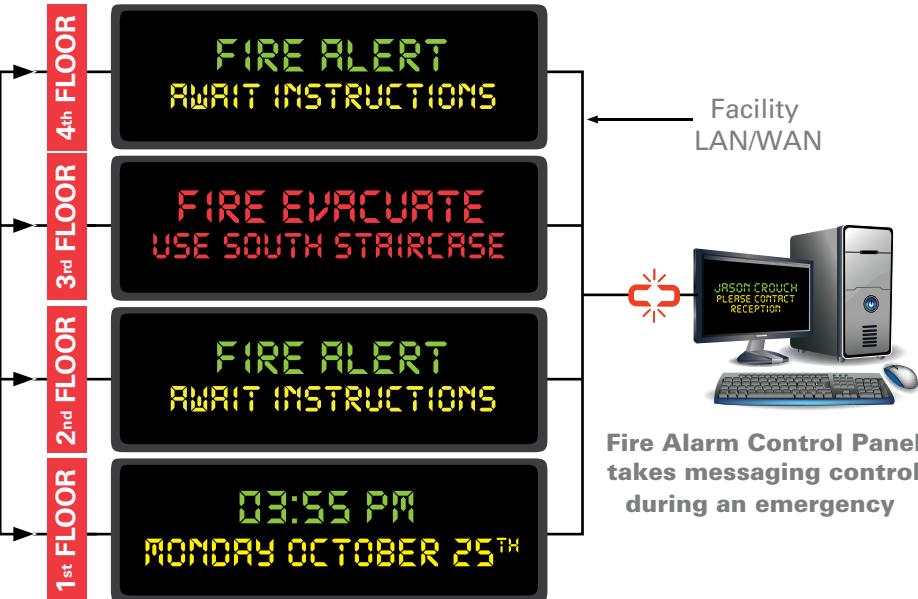


Fire detected in the system

Text Messaging
Appliances are powered by the fire alarm control panel



Simplex 4100ES Control Panel



TrueSite Workstation

Manage An Entire Fire and Life Safety Network From a Single Location

In today's complex multi-building, high-rise and campus environments, the protection of people, property and assets can hinge on the ability to quickly respond to an emergency and effectively manage system information from a central command centre.

With these challenges in mind, we created the Simplex TrueSite Workstation family of advanced life safety information management systems specifically for large, network installations. The leading edge TrueSite platform can help in monitoring and controlling multiple panels and buildings from a single location. UL/ULC listed and FM approved as a supervising station receiving unit, the TrueSite system can provide an outstanding life safety information management solution in commercial facilities, hospitals, universities, hotels, airports and other demanding environments.

A powerful platform for centralized management

When it comes to managing the wide array of information that drives a large fire alarm network, the TrueSite system stands out for its power, flexibility and ease of use.

A PC based graphical command centre that runs on Microsoft Windows, the TrueSite Workstation can seamlessly accept and process information from literally thousands of detectors, notification appliances and other devices.

The system has ability to:

- Monitor and control up to 100,000 points
- Support seven network loops and as many as 686 nodes
- Monitor any brand of control panel using agency listed digital alarm communicators
- Store historical data for up to 10 million events
- Graphically display information and events on a campus- wide site map and individual building floor plans

Emergency response and notification

The TrueSite Workstation has been designed to support fast, efficient response to emergency situations. In an emergency, TrueSite can receive incoming data from system devices and then automatically provide operators with colour coded graphical notification and action messages; customised WAV file based audio notifications; and customizable, step-by-step instructions to help on how to respond to the specific condition.

TrueSite workstation can support the simultaneous display of graphical and textual alarm data on up to four screens, and can give system operators added ability to quickly assess system activity and respond to emergencies. TrueSite also includes highly configurable email event notification capabilities, extending the power of the system to mobile and offsite team members.



High resolution colour graphics

With an advanced graphical user interface, the TrueSite Workstation provides touch screen or mouse-driven access to all system control features. It can import building site plans and graphically display fire, emergency, supervisory and trouble conditions occurring on the network. High screen resolutions provide additional space for detailed graphics. Pan and zoom technology makes it easy to zero in on a specific point of interest.

What can TrueSite Workstation do for you?

- Help you to strengthen protection of life and property through centralized life safety information management
- Help accelerate emergency response and minimise training costs with intuitive graphical interface and customised event specific operator instructions
- Improve operational efficiency through quick access to information and customised menus
- Expand information access through remote PC clients, iOS and Android mobile devices
- Simplify distribution and customising of reports with Export to XML capability
- Help you protect your investment and prepare for the future with forward-backward compatibility

Seamless integration, outstanding survivability

At a time when interoperability and continuity are more critical than ever, the TrueSite system is designed to combine seamless integration with industry leading survivability. Using its Digital Alarm Communication Receiver (DPCR) interface, TrueSite can accept alarm information from virtually any control panel. This can enable TrueSite to tie together, in an integrated solution, control panels from multiple vendors as well as panels in locations too remote to be networked.

The TrueSite system is further distinguished by its exceptional survivability. Unlike some other systems, the TrueSite workstation operates as an actual node on the fire alarm network. This architecture has the advantage of providing true peer-to-peer linkage with all panels on the network, thereby fortifying the TrueSite system's ability to continue operations even if a catastrophic event cripples other parts of the network.

TrueSite Workstation Incident Commander

TrueSite Workstation Power Built Into Your Fire Alarm Panel

TrueSite Workstation Incident Commander takes all of the leading-edge features of a TrueSite Workstation and delivers them in a space-saving package that mounts in a Simplex 4100ES fire alarm control panel cabinet.

Featuring a large, 19" (48.3 cm) high resolution, colour touch screen interface, Incident Commander runs off the UL864 listed power supply and secondary batteries in the panel, ensuring that the system continues to operate even if the electricity fails. This integrated design saves work space and eliminates the need for costly fire alarm listed UPS back-up power supplies when required by desktop systems.

TrueSite Workstation Incident Commander Fast Facts:

- Space saving design
- 19" colour, touch screen interface
- Mounts in the fire alarm panel cabinet
- Main and battery backup power supplied by the fire alarm panel
- Easy information access for first responders



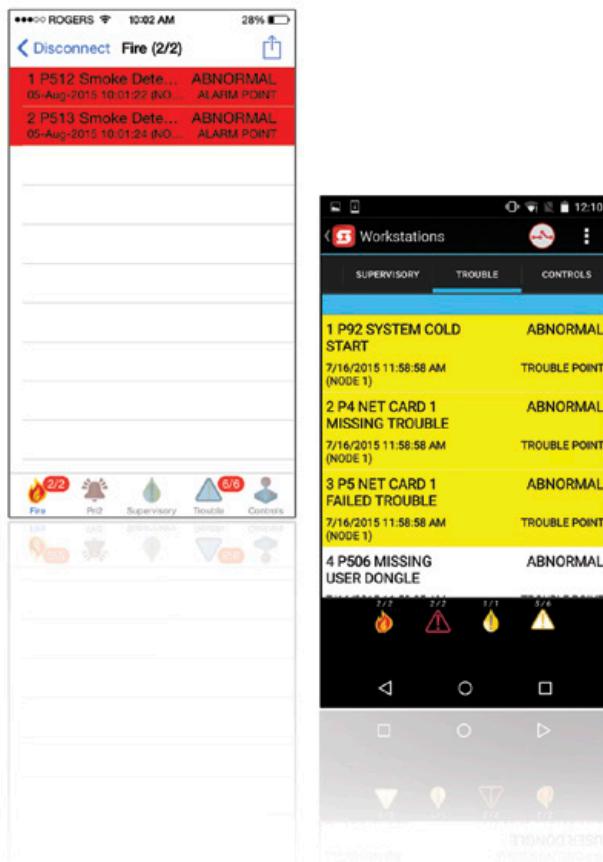
TrueSite Workstation Mobile Client

TrueSite Workstation in the Palm of Your Hand

The new TrueSite Workstation Mobile Client brings the features and functionality of the TrueSite Workstation to your Apple or Android™ mobile device or tablet. Available for download from iTunes® and Google Play™, the TrueSite Mobile Client helps you access and monitor your facility's TrueSite Workstation remotely, helping you with the flexibility to view system information and diagnostics wherever you are.

Mobile Client Features:

- Connect an unlimited number of Mobile Clients to your TrueSite Workstation with the purchase of one client license.
- Monitor up to 686 nodes on seven network loops
- Display of Fire Alarm conditions via active lists or graphical Icons
- Display of Priority 2 Alarm conditions via active lists or graphical Icons
- Display of Supervisory Service conditions via active lists or graphical Icons
- Display of Trouble conditions via active lists or graphical Icons
- Secure internet connectivity
- Access to system control operations (where acceptable to local code compliance officials):
 - Alarm Silence
 - System Reset
 - Priority 2 Reset
 - Audio Control – On/Off/Disable
 - Manual Audio Evacuation
 - All Alert
 - External Speaker Circuits (Page)
 - Local Speaker (On Evac)



A photograph of an industrial facility, likely a refinery or chemical plant, at sunset. The sky is a deep orange-pink. The structures are tall, cylindrical towers and complex piping systems, all bathed in the warm glow of the setting sun. The lighting creates strong highlights and shadows, emphasizing the metallic textures of the equipment.

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