

ves FIRE DETECTION SYSTEMS

Product Guide 2016-2017





VES was founded with one mission: to give dealers a comprehensive, cost-effective means of providing fire detection networks for corporate, educational, government and retail campuses of any size using 21st century technologies.

Building on our success in the Engineered Systems Market we continue to expand our Elite range of fire detection products including the all new Elite RS, XT & CP control panel. With Elite, VES enables Dealers to compete in the small and medium systems market, without compromising on features or expandability. Rest easy, knowing that our systems will grow with you, from a simple 32 point system to a 32,000 point system. No matter what the scope of your installation, all of the VES panels program with easy-to-use software or soft keys.

Our state-of-the-art line of sensors and modules are easy to install. Our panels have been designed with the ability to apply company specific professional branding plates. Your installation will be with state-of-the-art products both in performance and appearance. Whether you need a single product line to satisfy small installations or the ability to offer larger system solutions including multi-panel networking, VES has the product range. Remember all VES panels program with easy-to-use, easy-to-learn configuration software.



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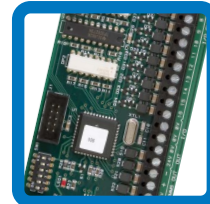
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Analog Addressable Fire Alarm Control Panels



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Fire Control Panel

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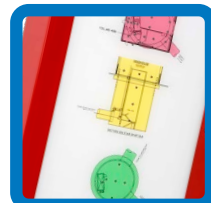
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Elite RS

Analog Addressable
Fire Control Panels
(1 or 2 Loops)

VF0810-xx (1 Loop)

VF0820-xx (2 Loops)

where xx = 10 for Red & 40 for Gray



Standard Features

- One full SLC circuit expandable to two
- 3 programmable relays
- 5.25A power supply
- Large graphic display
- Real time clock
- Compatible with eMATRIX graphics annunciator
- Powerful, network wide cause and effects (500 total). Fully user programmable by point or zone.
- Can be networked with additional RS and/ or Elite control panels
- Compatible with eVIEW Annunciator
- Programmable through a PC connection to the panel
- Same look and feel as Elite range
- Stores 1000 last events in history log
- Model ranges include with or without a Dual-Line internal DACT
- Compact, stylish enclosure
- Available in Red or Gray
- 2 Programmable NAC circuits with internal synchronization support.

Product Overview

- Elite RS is a versatile range of open protocol fire alarm control panels compatible with existing Elite fire alarm panel technology.
- Available with one or two detection loops for a total of 254 primary SLC points or up to 800 points using addresses and subaddresses. Elite RS uses leading edge microprocessor based electronics to provide a flexible control system with high reliability and integrity.
- Suitable for all small to medium sized fire detection systems, Elite RS control panels can be expanded and networked to become part of much larger systems if the need arises, therefore providing a future proof solution for any installation.
- With its large graphical display and ergonomic button and indicator layout, the Elite RS control panel is simple and straightforward to understand for installers, commissioning engineers and end users alike.

Added Features:

Elite RS with Internal Modem/ DACT (VF0816-xx/VF0826-xx)

- Dual line digital communicator and modem
- Central Station reporting; SIA and Contact ID
- On-board loop start terminal connections for both primary and secondary Telco lines

Elite RS with Internal Modem/ DACT & eNet (VF0817-xx/VF0827-xx)

- Dual line digital communicator and modem
- Central Station reporting; SIA and Contact ID
- On board loop start terminal connections for both primary and secondary Telco lines
- eNet networking card pre-installed (one required per node).

Elite RS & eNet (VF0815-xx/ VF0825-xx)

- eNet networking card pre-installed (one required per node).

Panel peripherals available:

eNET Networking Card - VF1170-00
1 loop expansion board - VF1054-00
Trim ring - VF1071-xx

Technical Specifications

Construction: 16AWG sheet steel

Dimensions: 14.5"W x 18.9"H x 4.25" D

Weight (without batteries): 20lb

Finish (lid & box): RAL3002 (Red) or BS 00 A 05 (Gray)

Finish (product labels): BS 00 A 05 (Gray)

Mains voltage supply: 115 or 230V AC 50 or 60 Hz. (specify when ordering, default is 115V)

Mains supply fuse: 1.6A 250V

Power supply DC rating: 24V 5.25 Amps

Aux 24V supply: Fused at 500 milliamps

Battery (24 hour standby): 9Ah 12V (2 per panel)
(non-networked)

Fault contact rating: 30V DC 1 Amp

Fire contact rating: 30V DC 1 Amp

Alarm contact rating: 30V DC 1 Amp

NAC output rating: 3.1V across both channels, 2.3V across any one

Detection loop: 250 milliamp output

Serial expansion port: Serial RS485

PC port: Serial RS232

Network connection: Optional network Cards allow the use of e-Net networking

NAC Synchronization: Internal Support

NAC Protocols: System Sensor, Wheelock, Gentex, Amseco

Elite Demo Case



VF1062-10 (Red)

VF1062-40 (Gray)

Standard Features

- Portable Sales Demonstration Case
 - Permanently mounted in a bi-fold case on wheels
- Case incorporates
 - Elite RS
 - eView Serial Annunciator
 - Addressable Pull Station
 - Addressable Heat Detector
 - Addressable Optical Detector
 - Addressable IO Module
 - Strobe
- Elite RS panel has a selectable voltage, 115V or 230V
- Allows full demo of features

Elite

Analog Addressable
Fire Control Panels
(2 or 4 Loops)

VF1420-xx (2 Loops)

VF1440-xx (4 Loops)

where xx = 10 for Red & 40 for Gray



Standard Features

- UL 864 9th Edition listed
 - Multi-Loop 2 Analog Addressable Loops Field upgradable to 4
 - 127 primary points per loop
 - Powerful, network wide cause and effects (500 total). Fully user programmable by point or zone.
 - Up to 800 points per panel when using devices and sub-points
 - Up to 10,000 ft. wiring length on SLC loop
 - 64 Panels on a network
 - Programmable through a PC connection to the panel, or through keypad
 - Programmable on-board relays – 5
 - Supervised Powered Outputs – 3
 - Programmable Notification Appliance Circuits: 4
 - Power per NAC: 1.6 Amps Max
 - Programmable outputs on SLC loop
 - Programmable Function button on front display
 - Fire Drill button on front display
 - Day and night sensitivity settings (user programmable)
 - Power Supply: 5.25 Amp, regulated & integrated
 - LCD Display: 8x40
 - Zonal Mode: Annunciation by zone w/o individual relationships
 - Panel Ring Modes: Common, Zonal, Stage 2
 - NAC Outputs programmable as Continuous, March, Temporal
 - Program Cause and Effects AND, OR, or Any Two (Cross Zone)
 - Battery size: Up to 17 Ah in standard enclosure; up to 52 Ah with external cabinet
 - Access levels: 3
 - Access key switch: Yes
 - Recognized for use in High Rise
 - One man walk test – Fire Test Mode
 - Available with semi flush trim ring
- Available in Red or Gray

Product Overview

- The VF1420 and VF1440 analog addressable FACP with networked releasing, supports 2 or 4 SLC loops for a total of 500 primary points and up to 800 points using subpoints. SLC loop communications uses standard twisted pair cabling, shielded cable is not necessary.
- The panel may be configured with various communication cards; Communications options support remote programming, central station monitoring, Virtual Panel and networking.
- The Panel can be configured as a stand-alone panel with just a few devices for a small building; it can also operate as the building system and can be part of a network with a total of 64 nodes serving a multiple building campus or a very large facility.
- Auto Learn capability provides a convenient method to troubleshoot new installations before final programming is loaded.

Added Features:

Elite with eNET (VF1425-xx/VF1445-xx)

- Network uses standard RS485 cabling
- Up to 2,000 ft. between adjacent panels
- 115 Kbps constant network speed
- Secure, fault tolerant communication
- Up to 64 nodes

Elite with DACT (VF1424-xx/VF1444-xx)

- Dual line digital communicator and modem
- Contact ID and SIA reporting
- UL 864 9th edition listed
- Zone or point reporting
- Backup and duplicate reporting

Also available:

2 loop expansion board - VF1053-00

Trim ring - VF1070-xx

Elite Panel with internal printer

- All Parts Number Available in Red or Gray with or without an internal printer.

When ordering specify -CP

where c = 1 for Red or 4 for Gray

where p = 0 for No internal printer or 3 for Internal printer



Technical Specifications

Primary AC: 120VAC @ 2 Amps 60hz (Optional 240 VAC 50hz)

Output DC: 24VDC @ 4 Amps

Power Supply: 5.25 Amp regulated and integrated

Charger Current: 1.25 Amps max.

Dimensions: 14.5"W x 24"H x 5"D

Weight: 25 lbs. (without batteries)

Color: Red (optional gray)

Display: 8 line x 40 character LCD (320 characters total)

Zones: 500 Zones per network

SLC loops: 2 or 4 (class A or B)

Devices per loop: 127 sensors & modules (800 addresses + sub-addresses max. per panel)

NAC Outputs: (4) 1.6 Amp @ 24VDC (class B)

Relay Outputs: (5) Form C 1 Amp @ 30VDC

Voltage Outputs: (3) 500mA @ 24VDC, reverse polarity supervised

Aux. Power: 500mA @ 24VDC

Aux. Inputs: (3) digital pull downs

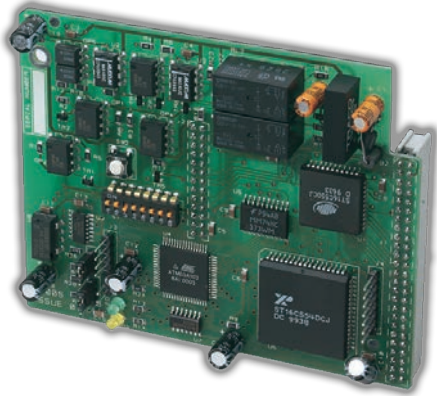
Current Consumption

VF1420	355 mA Standby
	650 mA Alarm
VF1440	455 mA Standby
	765 mA Alarm

eNET

Elite Networking

VF1170-00



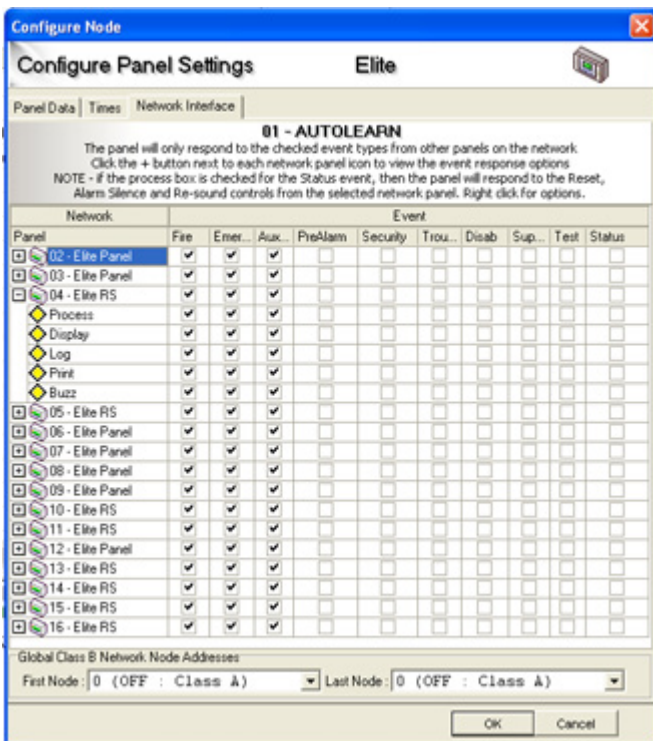
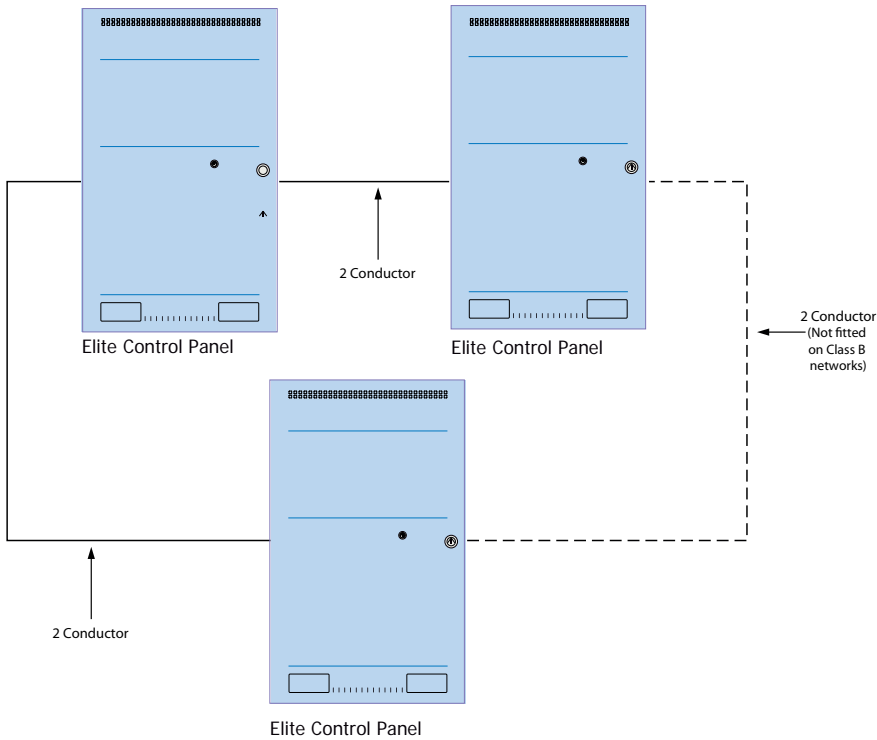
Standard Features

- Up to 64 nodes
- High integrity protocol when wired Class A
- Fully secure against short or open circuit faults
- Simple 2-wire loop connection
- Supports open ended networks for retrofit applications
- Network wide test and disablement functions
- Network wide cause and effect logic
- Flexible configuration options
- Panels configurable to act on network events or not as required

Product Overview

- The flexibility of the Elite system can be further enhanced by connecting control panels and repeaters together using a high integrity network.
- A simple 2-wire connection between each panel allows events to be transmitted to other parts of the system to provide indication or control on a system wide basis.
- Using the Loop Explorer configuration software, up to 64 nodes can be programmed to respond in a variety of ways to any system events as required.
- This flexibility extends the comprehensive cause and effect programming capability of Elite control panels to the entire network allowing actions, test modes or disablements to be started from any point.
- The fault tolerance of the network is such that any single open or short circuit fault will not result in any loss of information. Multiple faults are isolated and the network breaks into smaller networks which continue to work autonomously.

Two conductor loop wiring ensures network integrity by providing full isolation of faulty wiring segments.



Flexible network configuration options using simple to follow PC configuration software

Technical Specifications

Protocol: RS485

Connection: Two wire loop

Current Consumption: 40mA

Integrity: Full isolation of faulty nodes or wiring segments

Indicators: Data In and Data Out communications status

Cable length: 3900ft to adjacent nodes

(subject to cable type) (see technical manual)

Cable type: Belden 9271, Belden 9860, FP200 Gold

Compatible panels: Elite/ Elite RS (required for networking)

eVIEW

Analog Addressable
Serial Annunciator

VF1172-xx

where xx = 10 for Red & 40 for Gray



Red version -10



Gray version -40

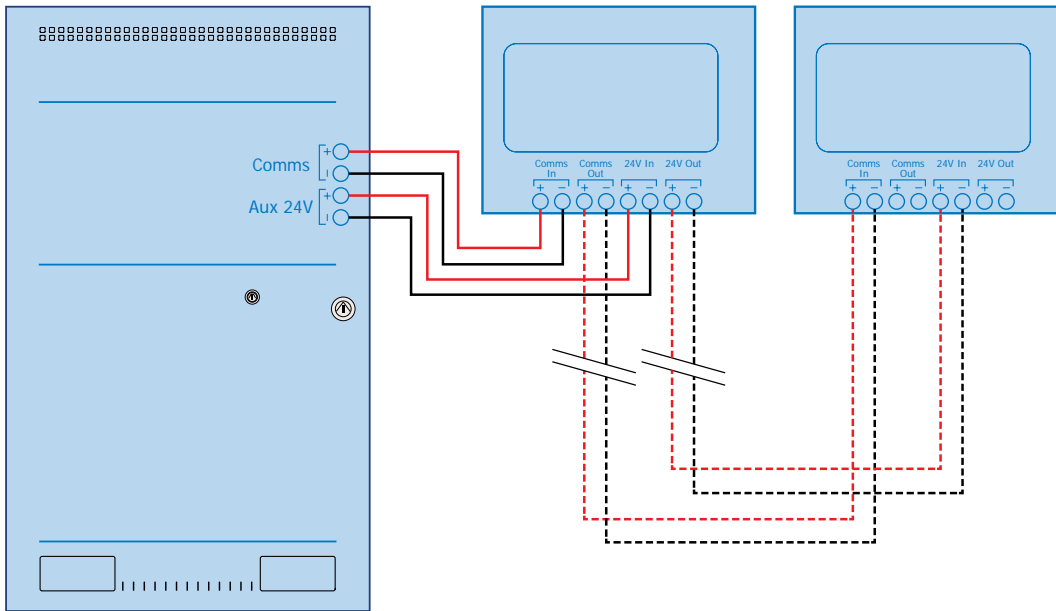
Standard Features

- Available in Red or Gray
- Up to 15 annunciators can be connected to each Elite or Elite RS fire control panel
- Large liquid crystal display (240 x 64 pixels)
- High brightness LED indications
- Internal sounder
- Replicates all panel controls (Elite)
- Simple, two-wire serial connection
- Small, Elite style enclosure
- Removable electronics for easy installation
- 24V DC powered
- Low power consumption
- Multi language options
- Connection supervised by Elite fire control panel
- Recess mounting using optional VF1173 kit

Product Overview

- Designed and manufactured to the highest standards in a quality controlled environment the eVIEW fire alarm annunciator provides a simple and convenient method of extending the controls and indications of the Elite fire alarm control panel to other locations.
- The large, graphic liquid crystal display and high brightness LED indicators duplicate the indications on the Elite fire alarm control panel at up to 15 additional locations via a simple, two-wire serial data connection.
- The eVIEW is powered by 24V DC (which can be via an additional 2 conductors from the control panel or local 24V DC listed supply).
- eVIEW is housed in a small enclosure which is styled similarly to the Elite control panel and is ideal for installations where a large control panel would be detrimental to decor such as entrance halls.
- Up to 15 eVIEW annunciators can be connected to each control panel on the Elite network making eVIEW ideal where multiple points of indication and/or control are required such as nurses stations or shop units.

Elite series control panel



The VES trim ring allows the eVIEW annunciator to easily be recess mounted. VES trim rings provides placement tabs that fold behind dry wall. Traditional screw mounting is available by 2 openings in each of the vertical frames. Conduit entry is not blocked by trim ring.

Technical Specifications

Construction: 18AWG sheet steel

Cable entry: 4 knockouts in back of box and 1 in left and right sides

Dimensions: 10.4"W x 7.5"H x 1.6"D

Weight: 3.5 lbs.

Finish : RAL3002 (Red) or BS 00 A 05 (Gray)

24V supply: 21 to 30V DC

Maximum ripple current: 200 millivolts

Quiescent current of panel in mains fail: 0.03 Amps

Serial data connection: 2 core RS485 (Up to 3937 feet total cable length)

Maximum terminal capacity: 12AWG

Trim Ring Technical Specifications

Part number: VF1173-xx

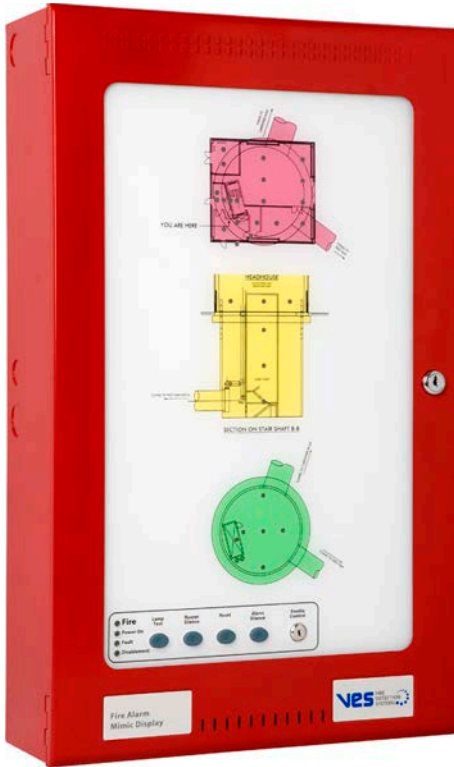
Outer Dimensions: 11.3"W x 8.6"H x 1.3"D

Inner Dimensions: 10.3"W x 7.4"

Color: Available in Red (VF1173-10) or Gray (VF1173-40)

eMATRIX

Configurable Floor Plan Mimic Annunciator



Standard Features

- Available in Red or Gray
- Up to 504 LED's can be controlled from any Elite panel
- Select up to 12 printed colors (not including background and building outline)
- Available in a range of standard enclosures to suit any application
- Custom sized units can be made upon request
- Choice of Red, Green or Yellow LED's
- eMATRIX can easily be upgraded on site with minimal cost and effort
- UL 864 9th edition listed

Product Overview

- The eMATRIX system uses flexible, optic light guides to illuminate areas on a floor plan, laid over a high resolution grid. This unique system dispenses completely with wiring and enables indicators to be moved, removed or added on site without the need for any wiring.
- All indicators can be configured to operate upon any event type and at point, zone or group level via the powerful and intuitive Loop Explorer configuration. eMATRIX can be supplied with or without LEDs and controls. Optional LEDs indicate Power on, Fire, Trouble and Disablement and optional controls are for Alarm silence, Buzzer silence, Lamp test and Reset.
- Housed in attractive, slimline enclosures to match Elite fire alarm panels and with high quality, full color floor plans, eMATRIX provides a clear, geographical indication of fire alarm activation enabling speedy identification of the source of an alarm.

View showing mimic mounted on inner door View showing LED grid



View showing internal layout



Technical Specifications

Current Draw: See Table 1
Supply voltage: 21 to 30V DC
Supply current: See above
Terminal capacity: 22 AWG to 12 AWG solid or stranded wire
Enclosure Size & mimic area: see 'Enclosure Size Options'
Construction: 16 gauge mild steel
Finish: epoxy powder coat
Mimic: 3mm Clear Anti-Glare Acrylic
Cabinet locks: CAT30 key
Communications interface: RS485 – Elite serial I/O bus protocol
Maximum distance from control panel: 4000 feet using RS485 data cable
IP rating: IP30
Operating temperature: 20F to 120F
Number of indicators (standard models): AM2 size - up to 40 LED's, AM3 size - up to 72 LED's, AM4 size - up to 88 LED's

No. of LED's	Standby Current	Full Alarm Current	Batteries for 24 hours	Batteries for 48 hours
40	0.026	0.09	0.88Ah	1.76Ah
72	0.052	0.18	1.75Ah	3.5Ah
88	0.078	0.36	2.8Ah	5.2Ah

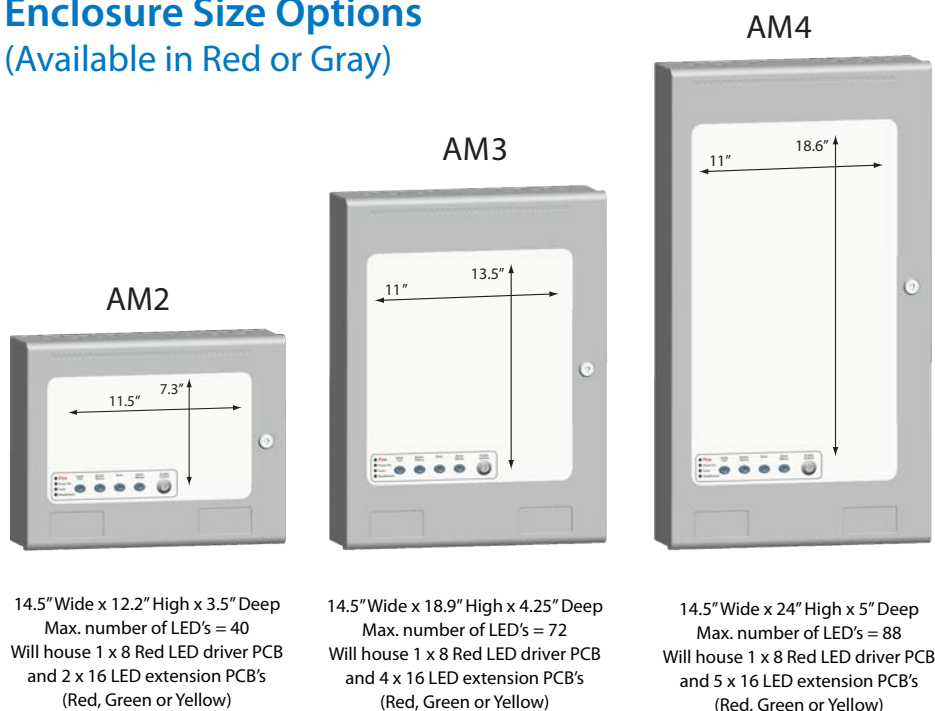
Table 1 - Current Draw

Model Numbers:

eMatrix Mimic Display, Model VF130X-YYY, -132X-YYY, -133X-YYY, where X can be the number 1 or 2 denotes color of enclosure, and YYY denotes the number of LED extension boards, which can be either 1, 3, or 5 boards.

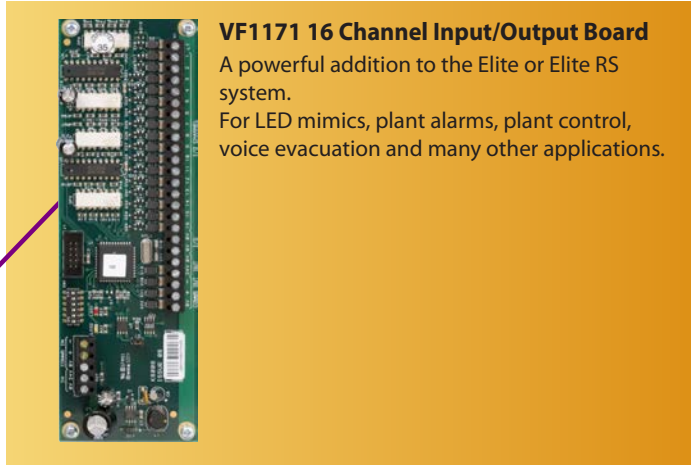
Please contact VES for assistance with any configuration options

Enclosure Size Options (Available in Red or Gray)



VF1171-00

16 Channel Input/ Output Board



VF1171 16 Channel Input/Output Board

A powerful addition to the Elite or Elite RS system.
For LED mimics, plant alarms, plant control, voice evacuation and many other applications.

Standard Features

- UL approved
- 16 channels
- Each channel configurable as input or output
- Inputs opto-isolated
- Outputs open collector transistor
- Simple 2 wire connection to control panel
- Up to 32 boards supported per panel (512 Input/Output Channels)
- Inputs and outputs configurable as per field devices
- Full cause and effects on all inputs and outputs
- Multi drop RS485 communications
- Can be used with other Elite I/O modules on the same panel
- Compatible with Elite RS panels

Product Overview

- To add more I/O capability to the extensive options already offered by the Elite control panel, up to thirty-two, sixteen channel I/O boards may be connected.
- When using a simple two-wire RS485 communications protocol, these boards may be mounted locally to the control panel or distributed on a bus up to 3,900 feet long by using a suitable cable.
- The flexibility of these boards is further enhanced by the fact that each of the channels is configurable as either an input or an output.
- Each channel may also be configured to produce a variety of input actions or respond to a variety of output types.
- All channels can contribute to, or respond to, system-wide cause and effects logic.
- Typical uses for I/O boards include geographical LED mimic displays and plant alarm inputs.
- Standard Elite control panels contain fixings for one I/O board, which can easily be connected using four small signal wires to the power and comms bus within the panel.
- Consideration must be taken as to the loading on the main panel.

Technical Specifications

Supply voltage: 21 - 30V DC
Quiescent current consumption: 20mA
Current per input: 3mA (maximum)
Current per output: 100mA (maximum)
Communications: RS485 two wire
Max. distance from panel: 3900 feet (using correct type of cable)
PCB size: 7.5" H x 2.4" W
Cable capacity: 2.5mm per terminal
Operating temperature: 14° F to 122° F (-10° C to 50° C)
Operating humidity: to 95% (non condensing)



GUIDE

VF1593-1x

Graphical PC User Interface for Fire Detection Systems

Standard Features

- Choice of text, graphic, event list display when an event occurs
- Versatile event analysis
- Total history archive
- Easy to program
- Secure system
- Cost effective compared to other systems
- Simple to use
- Unlimited map linking & zoom capability
- Support for 100's of graphics
- Display and control for multiple panels
- Event history explore and export to text or HTML documents

Product Overview

- Elite fire control panels can send data to, and be controlled by, the Guide system providing a single point of control for all alarms.
- The powerful 32 bit program features a standard Windows look and feel and runs under Windows® XP, Vista or Windows® 7&10.
- The system is highly configurable in terms of the style of presentation so that the end user can be presented with maps, text, photographs, audio or a combination of all as required.
- User profiles allow the system manager to control the options available to each individual system user.
- A comprehensive history logging and reporting system allows analysis of events and trends to be identified to reduce unwanted alarms.
- Easy to program and simple to use, Guide provides a cost-effective solution for fire alarm management at many levels.



Ordering Codes

Part number	Description
VF1593-10	GUIDE software - 1 node
VF1593-11	GUIDE software - 2-4 nodes
VF1593-12	GUIDE software - 5-8 nodes
VF1593-13	GUIDE software - 9-16 nodes
VF1593-14	GUIDE software - 17-32 nodes
VF1593-15	GUIDE software - 33-64 nodes

Note: Guide For use with Elite & Elite RS Panels.

Technical Specifications

	Recommended Minimum
Processor	Intel Pentium 1Ghz - The faster the better, 2Ghz will provide future proofing
Operating system	Windows® XP/Vista/ Windows 7 & 10 Professional - Will operate under Windows® 2000
Memory	256MB minimum - The larger the better
Hard disk	10GB minimum - >20GB would be better
Graphics	1024 x 768 16M colors - The driver must allow this mode with large fonts. Separate Graphics card with 256MB graphics memory recommended
Sound card	Any PC sound card
Loudspeaker	Any PC speakers - More convenient if built into PC
Monitor	Any that supports above graphics driver - 17 inch minimum recommended, the larger the better. (1024 x 768)
Pointing device	Mouse essential - Third button and wheels are supported. Touch screen option supported
Printer	Optional - Any type
Parallel port	Optional - Required if parallel printer to be used
USB ports	One per network - Isolated converter supplied for connection to fire alarm system
CDROM drive	Any - Required for installation of software and updates
Backup drive	CD Writer - To back up history

Note: Guide will be operating 24 hours a day for many years. It may be desirable to include on site PC maintenance as part of the package.

VF3001-10

Single Action
Addressable Pull Station

VF3002-10

Dual Action
Addressable Pull Station



Standard Features

- Single or Dual Action
- Wire head Connections
- Gold Plated Alarm Contacts
- Surface or Weatherproof Backbox
- Optional Auxiliary Alarm Contacts
- Optional Station Colors
- Combined with the VF6024-00 to provide an addressable interface to the Elite SLC loop

Product Overview

- The VF3001 and VF3002 pull stations are operated by pulling the handle marked "PULL" on the front of the station as far down as it will go. At that point, the station will lock in place and is easily visible from up to 50 feet. The activation handle is reset by opening the station with the key, placing the handle in the normal upright position and relocking the station.
- On the dual action, the push bar rotates inward allowing the "PULL" handle to be grasped and operated by a single hand. When used with the VF6024-00 Fast Response Contact Module, each addressable contact monitoring module is programmed with its own unique Signaling Line Circuit (SLC) loop address.
- Up to 127 devices can be placed on the Elite SLC loop. The module supervises the wiring to the contact with an End Of Line (EOL) resistor. If a fault condition occurs in the wiring, the module sends a trouble status signal to the fire alarm control panel. When a change of status is sensed by the fast response contact module, it sends an interrupt to the control panel indicating that an alarm has occurred.
- After addressing, Manual Pull Stations are fully configurable through Loop Explorer programming software.



Application

- The VF3001 and VF3002 are versatile, high-quality, metal Fire Alarm Pull Stations designed to meet any installation demand.
- Available in both single (VF3001) and dual action (VF3002) configurations. VF3001 and VF3002 pull stations are integrated with the VF6024-00 contact module to provide a simple-to-install addressable pull station. The normally open contact of each station, which closes when the pull station is activated, is rated for 1 Amp, 30VDC. The contacts are gold plated to avoid risk of corrosion.
- All models have been listed by UL and found in compliance to the latest requirements of the Americans With Disabilities Act (ADA). VF3001 / VF3002 stations from VES are equipped with key reset. All models mount on a standard, single gang backbox, VES VF3007-10 interior surface metal backbox or model VF3008-10 weatherproof interior surface metal backbox.

Technical Specifications

Rated voltage DCP powered loop: 17-41 VDC

Average consumption: 3.5mA

Alarm current: 17-28 VDC

Transmission: DCP - Digital Communication Protocol

Maximum humidity: 90% RH non-condensing

UL ambient installation temperature range: 32°F to 100°F

Operating temperature range: 14°F to 122°F

Color: Red

Ordering Codes

Part number	Description
VF3001-10	Single action addressable pull station
VF3002-10	Dual action addressable pull station
VF3007-10	Interior surface sheet metal backbox - red
VF3008-10	Weatherproof surface die cast metal backbox and gasket assembly - red
VF3009-00	Scored plastic (acrylic) breakrods (1 dozen per pack)
VF6024-00	Fast response contact module

Note: All models are supplied with one scored, acrylic breakrod & one key

AMS Manual Pull Stations

VF3031-10 Single Action w/ Hex Screw (H)

VF3032-10 Single Action w/ Key Lock (H)

VF3029-10 Dual Action w/ Key Lock (H)



VF3031-10



VF3032-10



VF3029-10

Standard Features

- Addressable integrated design
- All metal construction
- Single and dual action models available
- Extremely easy to operate
- Bi-colored status LED indicates Standby and Alarm conditions
- Address is programmable in EEPROM
- Address can be programmed when installed
- Key lock or hex key lock models available
- Enclosed switch with glass rod (included)
- Terminals accept up to 14AWG wire
- Surface mount back box available

Product Overview

- The AMS series of addressable manual pull stations provide a fast and practical means of manually initiating a fire alarm signal. Both single action and dual action manual pull stations are available. Resetting of the pull station requires either a Cat 30 key or a 1/8" hex key (depending upon the model used).
- An alarm condition is actuated by pulling down on the handle of the VF3031-10 and VF3032-10 single action models. On the dual action model VF3029-10 the Lift and Pull cover must be lifted before pulling down on the pull station handle. Once the pull station is activated, the handle cannot be put back into a normal standby condition without using the key operated reset feature.
- The AMS series is electronically addressable and includes a bi-colored status LED. The LED blinks green indicating normal communication with the DCP compatible SLC loop. When an alarm condition is actuated by pulling the handle, the LED will latch Red to indicate the alarm condition.

Engineering Specification

Manual pull stations shall be VES addressable AMS series single or dual action models, VF3031-10, VF3032-10 or VF3029-10. Models shall be made of 14 AWG CRS and painted with Red enamel. The words Fire Alarm shall be in a contrasting color and be embossed text 1/2" tall. The electronics shall be fully integrated into the manual pull station requiring only connection to the SLC loop of the control panel. Programming of the manual pull station address must be possible with the manual pull station fully installed.

Manual pull stations shall be Underwriters Laboratories Inc. Listed and be installed within the limits defined in the Americans With Disabilities Act.



Ordering Codes

Part number	Description
VF3031-10	Single action with Hex Screw Lock
VF3032-10	Single action with Hex Key Lock
VF3029-10	Dual action with Key Lock

Technical Specifications

Operating Voltage: 17-41 VDC

Average current consumption: 550µA (typical)
660µA (standard)

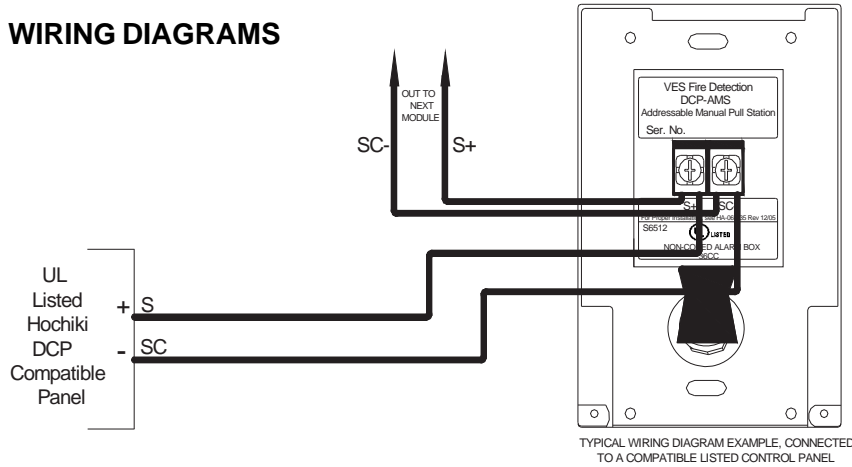
Ambient Temperature: 32°F to 120°F

Maximum humidity: 90% RH non-condensing

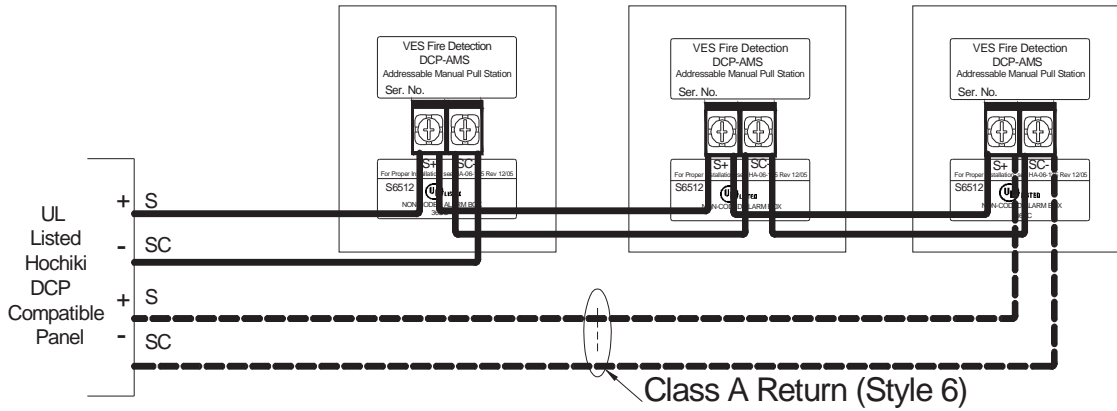
Dimensions: 3.4"W x 4.8"H x 2.0"D

Mounting: Single gang or 4" square electrical box

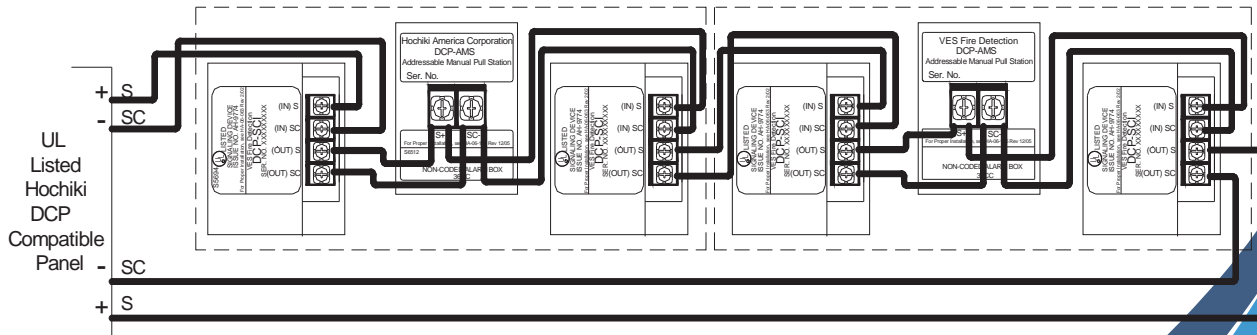
WIRING DIAGRAMS



Class B (Style 4)



Class A (Style 7)



VF2001-00

Ionization Smoke Sensor



Standard Features

- Low Profile - Only 2.22" high, including base
- Simple and reliable device addressing method
- Very low current consumption using the unique "Low Power Mode"
- Automatic compensation for sensor contamination
- Built in fire test feature
- Uses the noise immune Digital Communication Protocol (DCP), which utilizes interrupts for fast response to fires

Note:

Bases are not included with detectors, please order separately.

Application

- The VES Ionization smoke sensor has a responsive and highly stable operation that gives it an extremely wide range of uses. The VF2001 can be used in areas where early warning of trouble from superheated or flaming combustibles is expected. The VF2001 is also constructed to be effectively used where outside RFI (Radio Frequency Interference) and other electrical interference is expected to be encountered.

Operation

A single radioactive source ionizes two chambers which causes a small DC current to flow between the electrodes in each chamber. Smoke can freely enter the outer chamber while the inner chamber is virtually sealed to smoke. Smoke entering the outer chamber causes a reduction in the DC current, the imbalance between the two chambers is proportional to the smoke density. The two chamber design is utilized to compensate for changes in atmospheric and environmental conditions. When the sensed input value exceeds a predetermined threshold, an interrupt is issued to the control panel indicating a fire alarm.

The fire alarm control panel can adjust the sensor threshold to compensate for contamination. Up to 127 devices are permitted on each loop. A sensor address can be set by a hand held programming unit.

The sensor mounts to an electronics-free base and incorporates a locking mechanism for secure installation. The base provides mounting slots, terminals for field wiring and a third contact for a remote indicator/LED.

The sensor incorporates dual LED's for easy viewing of sensor status.

After addressing, Ionization Smoke Sensors are fully configurable through Loop Explorer Software.



Note: This is a discontinued product. VES still stocks a quantity of these units on a limited basis.

Engineering Specification

The Dealer shall furnish and install where indicated on the plans, dual-chamber ionization sensors, VES part number VF2001. The combination sensor head and twist lock base shall be used with the UL listed Elite fire alarm control panel.

The Sensor and Base shall be UL listed as compatible with the fire alarm control panel (FACP). The base shall permit direct interchange with the VES, VF2002, VF2005 & VF2011 photoelectric smoke sensor, VF2001 ionization type smoke sensor, VF2003 & VF2010 heat sensor, and the VF2008 & VF2012 Multi-Criteria sensor.

The sensitivity of the sensor shall be capable of being measured by the control panel.

The vandal-resistant, security locking feature shall be used in those areas as indicated on the drawing.

The locking feature shall be optional and can be implemented when required.

State-of-the-art communications protocol, DCP, allows multiple system component types to be used concurrently in a system's signal conditioning loop.

Bases

The VF7001 and the VF7002 mounting bases are electronics free and are a simple rugged design with screw terminals for wiring connections. A common mounting base allows sensor interchange and maintains loop continuity when sensors are removed. A simple anti-tamper head locking system is provided which is enabled by removing a small plastic tab on the back of the sensor. Once locked, the head can be removed using a small diameter screw driver.

Technical Specifications

Operating Voltage: 17-41 VDC

Current Consumption Standby:

Normal: 350 μ A (typical)

Low power Mode: 140 μ A (@0.75 sec.)

Average when Polled: 2 mA, 8 mA (Alarm)

Transmission Method: DCP—Digital Communication Protocol

Maximum Humidity: 95% RH Non-Condensing

UL Ambient Installation Temp. Range: 32° F to 100° F

Operating Temperature Range: 14° F to 122° F

Air Velocity Range: 0-4000 fpm

Color & Case Material: Bone PC / ABS Blend

Weight: 4.2 oz, 5.9 oz with 4" base

Ordering Codes

Part number	Description
VF2001-00	Ionization Smoke Detector
VF7001-00	4" Mounting Base
VF7002-00	6" Mounting Base
VF7008-00	6" Sounder Base

VF2011-00

Photoelectric Smoke Sensor



Standard Features

- Low Profile - Only 2.0" high, including base
- Simple and reliable device addressing
- Automatic compensation for sensor contamination
- Built-in fire test feature
- Uses the noise-immune Digital Communication Protocol (DCP), which utilizes interrupts for fast response to fires
- Two built-in power/alarm LEDs
- Programmable non-polling LEDs
- Non-directional smoke chamber
- Vandal resistant security locking feature
- Removable smoke labyrinth for cleaning or replacement

Note:

Bases are not included with detectors, please order separately.

Application

- The VF2011 Photoelectric Smoke Sensor is particularly suited to detecting optically dense smoke typical of fires involving materials such as soft furnishings, plastic, foam or other similar materials which tend to smolder and produce large visible smoke particles. VES's unique design allows fast response to flaming fires as well as smoldering fires while preventing false alarms.

Operation

The detection chamber consists of a light-emitting diode (LED) and photodiode arrangement. The chamber is designed such that light emitted by the LED cannot normally reach the photodiode. In the event of fire, particles of smoke enter the chamber and scatter the light. As the smoke level increases, the scattering effect increases, causing more light to hit the photodiode. The chamber contains a unique baffle design which allows smoke to enter the chamber while preventing external light from affecting the photodiode. The photodiode input level is sampled to sense smoke density.

When the smoke density exceeds a preset threshold the sensor transmits an interrupt to the fire control panel indicating a fire condition. The fire alarm control panel can adjust the sensor threshold to compensate for contamination.

Up to 127 devices are permitted on each SLC loop. A sensor address is set by a hand-held programming unit. The sensor mounts to an electronics-free base and incorporates a locking mechanism for secure installation. The base provides mounting slots, terminals for field wiring and a third contact for a remote indicator/LED. The sensor incorporates dual LEDs for easy viewing of sensor status.



Engineering Specification

The contractor shall furnish and install where indicated on the plans, photoelectric sensors VES Model VF2005. The combination sensor head and twist lock base shall be UL listed compatible with a UL listed fire alarm control panel.

The Sensor and Base shall be UL listed as compatible with the fire alarm control panel (FACP). The base shall permit direct interchange with the VES, VF2002, VF2005 & VF2011 photoelectric smoke sensor, VF2001 ionization type smoke sensor, VF2003 & VF2010 heat sensor, and the VF2008, VF2012 & VF2014 Multi-Criteria sensor.

The sensitivity of the sensor shall be capable of being measured by the control panel.

The vandal-resistant, security locking feature shall be used in those areas as indicated on the drawing. The locking feature shall be optional and can be implemented when required.

Bases

The VF7001 and the VF7002 mounting bases are electronics free and are a simple rugged design with screw terminals for wiring connections. A common mounting base allows sensor interchange and maintains loop continuity when sensors are removed. A simple anti-tamper head locking system is provided which is enabled by removing a small plastic tab on the back of the sensor. Once locked, the head can be removed using a small diameter screw driver.

Technical Specifications

Operating Voltage: 17-41 VDC
Standby Current: 450µA
Alarm Current: 540µA
Transmission Method: DCP—Digital Communication Protocol
Maximum Humidity: 95% RH Non-Condensing
UL Temperature Range: 32° F to 115° F
Operating Temperature Range: 14° F to 122° F
Sensitivity Range: 0.7 - 4.0%/ FT @ 300 FPM 0.7 - 3.86%/ FT @ 2000 FPM 0.7 - 2.65%/ FT @ 4000 FPM
Air Velocity Range: 0-4000 fpm
Color & Case Material: Bone/ White - ABS Blend
Weight: 3.4 oz, (5.1 oz with 4" base)

Ordering Codes

Part number	Description
VF2011-00	Photoelectric Smoke Detector
VF7001-00	4" Mounting Base
VF7002-00	6" Mounting Base
VF7008-00	6" Sounder Base

VF2010-00

Fixed Temp/ Rate of Rise Heat Sensor



Standard Features

- Low Profile - Only 2.0" high, including base
- Simple and reliable device addressing method
- Uses the noise immune Digital Communication Protocol (DCP), which utilizes interrupts for fast response to fires
- Rate of Rise temperature threshold = 15°F/Min (determined by panel)
- Adjustable threshold temperature = 135°F - 190°F (determined by panel)

Note:

Bases are not included with detectors, please order separately.

Application

- The VF2010 Fixed Temperature / Rate of Rise sensors provide accurate temperature measurement data to the fire alarm control panel. These sensors are well-suited for environments where dust, cooking fumes or other factors make the use of smoke sensors impractical.

Operation

The VF2010 incorporates a highly linear thermistor circuit. The specially designed cover protects the thermistor while allowing maximum air flow. The thermistor circuit produces a voltage proportional to the temperature; this information is transmitted to the control panel as a digital value. When the ambient temperature exceeds a preprogrammed threshold (fixed temp or rate of rise), the sensor transmits an interrupt to the control panel indicating a fire alarm. The fire alarm control panel can adjust the sensor's fixed temperature threshold for different installation requirements.

Up to 127 devices may be installed on each SLC loop. The sensor address may be set by a hand-held programming unit. The sensor mounts to an electronics-free base and incorporates a locking mechanism for security. The base provides mounting slots, terminals for field wiring and a third terminal for a remote indicator/ LED. The sensor has dual LEDs for easy viewing of the sensor status.



Engineering Specification

Heat sensors are installed in accordance with NFPA (National Fire Protection Association) 72, the UL Listed Spacing Requirements and the rules and regulations set forth by the local authorities having jurisdiction.

The contractor shall furnish and install, where indicated on the plans, Fixed Temp / Rate of Rise Automatic heat sensors.

The Sensor and Base shall be UL listed as compatible with the fire alarm control panel (FACP). The base shall permit direct interchange with the VES, VF2002, VF2005 & VF2011 photoelectric smoke sensor, VF2001 ionization type smoke sensor, VF2003 & VF2010 heat sensor, and the VF2008, VF2012 & VF2014 Multi-Criteria sensor.

The vandal-resistant, security locking feature shall be used in those areas as indicated on the drawing. The locking feature shall be optional and can be implemented when required.

It shall be possible for the control panel to perform a functional test of the sensor without heat. The test method shall simulate the effects of heat on the device to insure testing of internal circuitry.

Bases

The VF7001 and the VF7002 mounting bases are electronics free and are a simple rugged design with screw terminals for wiring connections. A common mounting base allows sensor interchange and maintains loop continuity when sensors are removed. A simple anti-tamper head locking system is provided which is enabled by removing a small plastic tab on the back of the sensor. Once locked, the head can be removed using a small diameter screw driver.

Technical Specifications

Operating Voltage: 17-41 VDC

Standby Current: 350 μ A

Alarm Current: 500 μ A

Transmission Method: DCP—Digital Communication Protocol

Maximum Humidity: 95% RH Non-Condensing

UL Temperature Range: 135° F to 190° F

Operating Temperature Range: 32° F to 190° F

Rate of Rise: 15° F/ Min

Color & Case Material: Bone/ White - ABS Blend

Weight: 3.2 oz, (4.9 oz with 4" base)

Ordering Codes

Part number	Description
VF2010-00	Fixed Temp/ Rate of Rise Heat Sensor
VF7001-00	4" Mounting Base
VF7002-00	6" Mounting Base
VF7008-00	6" Sounder Base

VF2012-00

Multi Criteria Sensor - Smoke & Heat



Standard Features

- Low Profile - Only 2.00" high, including base
- Simple and reliable device addressing
- Automatic compensation for sensor contamination
- Built-in fire test feature
- Uses the noise-immune Digital Communication Protocol (DCP), which utilizes interrupts for fast response to fires
- Two built-in power/alarm LEDs
- Programmable non-polling LEDs
- Non-directional smoke chamber
- Vandal resistant security locking feature
- Removable smoke labyrinth for cleaning or replacement

Note:

Bases are not included with detectors, please order separately.

Application

- The VF2012 Multi-Criteria Sensor is particularly suited for detecting smoke produced by a wide range of combustibles found in various applications. Temperature monitoring is achieved by a thermistor placed for optimum sensitivity. Hochiki's unique design allows fast response to flaming fires as well as smoldering fires while minimizing false alarms.

Operation

The VF2012 chamber consists of a light-emitting diode (LED) and photodiode arrangement. The chamber is designed such that light emitted by the LED cannot normally reach the photodiode. In the event of fire, particles of smoke enter the chamber and scatter the light. As the smoke level increases, the scattering effect increases, causing more light to hit the photodiode. The chamber contains a unique design which allows smoke to enter the chamber while preventing external light from affecting the photodiode. The photodiode input level is sampled to sense smoke density. When the smoke density exceeds a preset threshold the sensor transmits an interrupt to the fire control panel indicating a fire condition. The fire alarm control panel can adjust the sensor threshold to compensate for contamination.

The VF2012 Heat portion incorporates a highly linear thermistor circuit, with two thermistors mounted externally. The specially designed cover protects the thermistors while allowing maximum air flow. The thermistor circuit produces a voltage proportional to temperature which is scaled, and transmitted as a digitally encoded value to the control panel. When the ambient temperature exceeds a preprogrammed threshold (fixed temperature), the sensor transmits an interrupt to the control panel indicating a fire alarm. The fire alarm control panel can adjust the sensor threshold for different standard's requirements.

Up to 127 devices are permitted on each SLC loop. A sensor address can be set by a hand-held programming unit. The sensor mounts to an electronics-free base and incorporates a locking mechanism for secure installation. The base provides mounting slots, terminals for field wiring and a third contact for a remote indicator/LED. The sensor incorporates dual LEDs for easy viewing of sensor status.



Engineering Specification

The contractor shall furnish and install where indicated on the plans, photoelectric sensors VES Model VF2005. The combination sensor head and twist lock base shall be UL listed compatible with a UL listed fire alarm control panel.

The Sensor and Base shall be UL listed as compatible with the fire alarm control panel (FACP). The base shall permit direct interchange with the VES, VF2002, VF2005 & VF2011 photoelectric smoke sensor, VF2001 ionization type smoke sensor, VF2003 & VF2010 heat sensor, and the VF2008, VF2012 & VF2014 Multi-Criteria sensor.

The sensitivity of the sensor shall be capable of being measured by the control panel.

The vandal-resistant, security locking feature shall be used in those areas as indicated on the drawing. The locking feature shall be optional and can be implemented when required.

Bases

The VF7001 and the VF7002 mounting bases are electronics free and are a simple rugged design with screw terminals for wiring connections. A common mounting base allows sensor interchange and maintains loop continuity when sensors are removed. A simple anti-tamper head locking system is provided which is enabled by removing a small plastic tab on the back of the sensor. Once locked, the head can be removed using a small diameter screw driver.

Technical Specifications

Operating Voltage: 17-41 VDC
Standby Current: 450µA
Alarm Current: 540µA
Transmission Method: DCP—Digital Communication Protocol
Maximum Humidity: 95% RH Non-Condensing
UL Temperature Range: 135° F to 150° F
Operating Temperature Range: 14° F to 122° F
Sensitivity Range: 0.7 - 4.0%/ FT @ 300 FPM 0.7 - 3.86%/ FT @ 2000 FPM 0.7 - 2.65%/ FT @ 4000 FPM
Air Velocity Range: 0-4000 fpm
Color & Case Material: Bone/ White - ABS Blend
Weight: 4.2 oz, (5.9 oz with 4" base)

Ordering Codes

Part number	Description
VF2012-00	Multi Criteria Sensor
VF7001-00	4" Mounting Base
VF7002-00	6" Mounting Base
VF7008-00	6" Sounder Base

VF2014-00

Multi-Criteria Sensor -

Carbon Monoxide, Smoke, Heat



Standard Features

- 16 Programmable Modes of Operation, based upon 9 different detection factors allow extreme application flexibility
- Compatible with VF7005 Low Frequency Sounder base to provide a prioritized Temporal 3 Signal in case of Fire or Temporal 4 Signal in case of CO
- Simple and reliable device addressing method
- Automatic compensation for sensor contamination
- Built-in fire test feature
- Uses the noise immune Digital Communication Protocol (DCP), which utilizes interrupts for fast response to fires
- Dual programmable LED's provide visual alarm / power indications.
- Non-directional smoke chamber
- Pre-Alarm Function
- 10 Year life span on CO sensor

Application

- The VF2014 Multi-Criteria Sensor is particularly suited for detecting smoke produced by a wide range of combustibles found in various applications. Temperature monitoring is achieved by a thermistor placed for optimum sensitivity. The sensor is also suited for detecting deadly levels of carbon monoxide (CO).
- The sensors unique design allows fast response to flaming/smoldering fires and carbon monoxide levels while minimizing nuisance alarms.

Operation

The VF2014 smoke detection chamber consists of a light-emitting diode (LED) and photodiode arrangement. The chamber is designed such that light emitted by the LED cannot normally reach the photodiode. In the event of fire, particles of smoke enter the chamber and scatter the light. As the smoke level increases, the scattering effect increases, causing more light to hit the photodiode. The chamber contains a unique design which allows smoke to enter the chamber while preventing external light from affecting the photodiode. The photodiode input level is sampled to sense smoke density. When the smoke density exceeds a preset threshold the sensor transmits an interrupt to the fire control panel indicating a fire condition. The fire alarm control panel can adjust the sensor threshold to compensate for contamination.

The VF2014 heat portion incorporates a highly linear thermistor circuit, with two thermistors mounted externally. The specially designed cover protects the thermistor while allowing maximum air flow. The thermistor circuit produces a voltage proportional to temperature which is scaled, and transmitted as a digitally encoded value to the control panel. When the ambient temperature exceeds a preprogrammed threshold (fixed temperature), the sensor transmits an interrupt to the control panel indicating a fire alarm. The fire alarm control panel can adjust the sensor threshold for different standard's requirements.

The VF2014 carbon monoxide (CO) sensing cell serves a dual purpose of supplementing smoke detection in combination with the photodiode arrangement and monitoring colorless, odorless and deadly carbon monoxide levels. When the carbon monoxide exceeds the poisonous levels, the sensor transmits an interrupt to the control panel indicating a CO alarm.



Pending



Engineering Specification

The contractor shall furnish and install VF2014 (Multi-Criteria Sensor) & VF7005 (Low Frequency Sounder Base) as indicated on the plans. The Multi-Criteria Sensor head and Low Frequency Sounder Base shall be UL listed and compatible with the UL listed fire alarm control panel.

The Sensor and Base shall be UL listed as compatible with the fire alarm control panel (FACP).

The base shall permit direct interchange with the VES, VF2002, VF2005 & VF2011 photoelectric smoke sensor, VF2001 ionization type smoke sensor, VF2003 & VF2010 heat sensor, and the VF2008 & VF2012 & VF2014 Multi-Criteria sensor.

The sensitivity of the sensor shall be capable of being measured by the control panel.

Technical Specifications

Operating Voltage: 17-39.5 VDC

Standby Current: 600µA

Alarm Current: 30mA Max

Transmission Method: DCP—Digital Communication Protocol

Maximum Humidity: 95% RH Non-Condensing

UL Temperature Range: 32° F to 120° F

Operating Temperature Range: 14° F to 122° F

Sensitivity Range: 3.89%/ft. @ 1000 FPM (Duct application)
3.56%/ft. @ 2000 FPM (Duct application)
3.63%/ft @ 3000 FPM (Duct application)
4.00%/ft @ 4000 FPM (Duct application)

Heat Sensor Temperature Range: 135° F to 150° F

Rate of Rise: 15° F / min

CO Sensor: 70 ppm Response Time 60 - 240 min

Smoke Sensitivity: 0.77%/ft. - 3.47%/ft.

Dimensions: 3.94" D x 1.56" H

Color & Case Material: Bone/ White - ABS Blend

Weight: 4.2 oz

Ordering Codes

Part number	Description
VF2014-00	Multi Criteria Sensor
VF7005-00	6" Low Frequency Sounder Base

VF5001-00

Analog Duct Sensor



VF5002-00

Analog Duct Sensor
with Relays

Standard Features

- Detects and limits the spread of smoke throughout building HVAC ducts
- Compatible with building automation and fire alarm systems
- Installs quickly and easily
- No screens or filters to clean
- Rugged gray steel back box with clear cover
- Accessories - Remote LED alarm indication capability
- Meets UL 268A Requirements

Application

- The VES VF5001 and VF5002 Analog Photoelectric Duct Smoke Sensor provides early detection of smoke and products of combustion present in air moving through HVAC ducts in Commercial, Industrial and Residential applications.
- The Analog Photoelectric Duct Smoke Sensor is designed to prevent the recirculation of smoke in areas by the air handling systems, fans and blowers. Complete systems may be shut down in the event of smoke detection.
- The VES VF5001 and VF5002 operate on a DCP powered loop (24 VDC source required for VF5002).

Operation

The VF5001 and VF5002 are designed and built to meet all local requirements, as well as the NFPA regulations regarding duct smoke sensors.

Output terminals are provided for remote accessories such as a horn, strobe, remote status indicators and reset key switches or push buttons. Air sampling is accomplished by two tubes which protrude into the duct. An exhaust tube of one standard length (7.5") is supplied in the installation kit with the smoke duct unit. Once the duct width has been determined the air intake sampling tubes must be ordered. Sampling tubes are supplied in three standard lengths 3 ft., 5 ft. and 10 ft. and cut to size to fit the duct.

Mounting the duct smoke unit is accomplished by the use of a template and 4 sheet metal screws, which are provided. Mounting can be achieved without the removal of the clear cover which is secured by 4 capture screws.

The compact VF5002 contains 2 sets of form "C" contacts rated at 10 amps.

The pilot and alarm visual indicators, provided on the front of the VF5002 duct unit, signal the operating status of the device. A manual test/ reset switch is located alongside the visual indicators.

After addressing, Analog Duct Sensors are fully configurable through Loop Explorer Software.

Engineering Specification

The Dealer shall furnish and install where indicated on the plans, the VES VF5001 or VF5002 Analog Photoelectric Duct Sensors. The modules shall be UL listed compatible with VES Digital Communications Protocol (DCP) supporting Elite control panel loops. The sensors shall be listed by Underwriters Laboratories per UL 268A.

The sensors shall operate at air velocities from 300 feet per minute to 4,000 feet per minute. The duct detector housings shall be of metal construction and complete mechanical installation may be performed without removal of detector cover. The duct sensor shall not require additional filters or screens which must be maintained. The housing shall contain a base which will accept an analog photoelectric sensor head. Terminal connections shall be of the screw type and be a minimum of #6 screw. For installations requiring relay function, terminals shall be provided for remote pilot, remote alarm indication, strobe/ horn and remote key switch. For installation not requiring relay function, visual indication of alarm and power must be provided on detector front.

A manual reset switch shall be located on front of the device. All wiring must comply with local codes and regulations.

State-of-the-art communications protocol, DCP, allows multiple system component types to be used concurrently in a system's Signaling Line Circuit.

Technical Specifications

Operating Voltage: 17-41 VDC

Average Current Consumption (on S-SC Line):

VF5001-00: 2mA

VF5002-00: 10mA (Note: Aux power required for the VF5002-00)

Contacts:

VF5001-00: N/A

VF5002-00: 2 Independently controlled

Alarm Current:

VF5001-00: 8mA

VF5002-00: 55mA

Operating Temperature Range: 32° F to 120° F

Relative Humidity: 10-85% RH Non-Condensing

Contact Rating: 1A@30VDC / 0.5A@125VAC

Air Velocity: 300 to 4,000 ft/min

Sampling Tubes: 3' (VF5003-00), 5' (VF5004-00) or 10' (VF5005-00)

Remote Indication:

VF5001-00: Alarm

VF5002-00: Alarm, Pilot

Analog Duct Sensor Remote Accessories

Product Overview

- The Remote Accessories are designed to be used with the analog Duct Sensors to provide audible and visual indication as well as remote test/ reset functions. These devices are constructed of attractive, yet durable brushed stainless steel and mount on a standard single or double gang electrical backbox.



VF5020-00
Remote Alarm
LED



VF5040-00
Remote Controls -
Pilot & Alarm



VF5021-00
Remote Push
Button Test Switch



VF5039-00
Remote Controls -
Pilot, Alarm & Test/
Reset Push Button



VF5038-00
Remote Controls -
Pilot & Trouble



VF5037-00
Remote Controls -
Pilot, Trouble & Test/
Reset Push Button



VF5023-00
Key Op Test Switch
for Duct Smoke
Single LED



VF5036-00
Remote Controls -
Pilot, Alarm & Key
Operated



VF5035-00
Remote Controls -
Pilot, Trouble & Key
Operated



VF5034-00
Remote Controls -
Alarm Only



VF5033-00
Remote Controls -
Trouble Only



VF5032-00
Remote Controls -
Horn, Pilot & Alarm



VF5022-00
Key Op Test Switch for
Duct Smoke Dual LED



VF5031-00
Remote Controls - Double
Gang, Horn, Key Operated
Reset, Trouble, Alarm & Pilot



VF5030-00
Remote Controls -
Horn Only

Technical Specifications

Power Requirements:

Alarm LED: 15mA @ 24V DC

Trouble LED: 15mA @ 24V DC

Pilot LED: 15mA @ 24V DC

Alarm Horn: 20mA @ 24V DC

Sound Pressure (Alarm Horn): 78db @ 10ft

Dimensions:

Single Gang: 4 1/2" H x 2 3/4" W

Double Gang: 4 1/2" H x 4 1/2" W

Wiring:

LEDs/ Horn: 6" /24 SWG pigtails

Switches: 6" /22 SWG pigtails

	Pilot LED (Green)	Alarm LED (Red)	Fault/ Trouble LED (Yellow)	Push Button Test/ Reset	Key Operated Test/ Reset	Horn	Single Gang	Double Gang
VF5020-00		●					●	
VF5040-00	●	●					●	
VF5021-00		●		●			●	
VF2039-00	●	●		●			●	
VF5038-00	●		●				●	
VF5037-00	●		●	●			●	
VF5023-00		●			●		●	
VF5036-00	●	●			●		●	
VF5035-00	●		●		●		●	
VF5034-00		●					●	
VF5033-00			●				●	
VF5032-00	●	●				●	●	
VF5022-00	●	●			●	●		●
VF5031-00	●	●	●		●	●		●
VF5030-00						●	●	

VF7001-00

4" Sensor Base

VF7002-00

6" Sensor Base



Standard Features

- UL Listed
- Designed for use with all NS analog sensors.
- Available in 4 and 6 inch models.
- Contains a security locking tab for tamper protection.

Application

- The VF7001 4" base and VF7002 6" base are designed for use with VES analog style sensors models VF2001, VF2002, VF2005, VF2003, VF2008, VF2010, VF2011 and VF2012.
- Each base is connected to an Elite Signaling Line Circuit (SLC) and provides easy replacement of sensors, without disturbing the wiring.
- The bases are electronics free and contain a simple rugged design with screw terminals for wiring connections. A common mounting base allows sensor interchange and maintains loop continuity when sensors are removed. A simple anti-tamper head Locking system is provided which is enabled by removing a small plastic tab on the back of the sensor. Once locked, the head can only be removed using a small diameter screw driver.

Technical Specifications

VF7001-00: 4" Sensor Base

VF7002-00: 6" Sensor Base

Security feature: Plastic Tamper-Lock

Color & Case Material: Bone PC / ABS Blend

Compatible Sensors: VF2001, VF2002, VF2005, VF2003, VF2008, VF2010, VF2011 and VF2012

Operation

The VF7001 4" base and VF7002 6" base are designed specifically for use with the VES Analog sensors, models VF2001 Ionization Smoke Sensor, VF2002, VF2005 & VF2011 Photoelectric Smoke Sensor, VF2003 & VF2010 Heat Sensor and VF2008 & VF2012 Multi-Criteria Sensors.

The VF7001 and VF7002 common mounting bases allow for complete compatibility for all of the VES Analog sensors.

The bases are lightweight and very thin, providing a low profile once installed. The solderless screw terminals enable quick and easy wiring connections.

Engineering Specifications

The Dealer shall furnish and install where indicated on the plans, models VF2001 Ionization Smoke Sensor, VF2002, VF2005 & VF2011 Photoelectric Smoke Sensor, VF2003 & VF2010 Heat Sensor and VF2008 & VF2012 Multi-Criteria Sensors.

The selected sensor shall be attached to the VF7001 or VF7002 base and permit direct interchange between the listed sensors.

The vandal-resistant, security locking feature shall be used in those areas as indicated on the drawing. The locking feature shall be optional and can be implemented when required.

Note: SLC maximum resistance is 50 ohms.



VF7003-00

4" Sensor Base
w/Built-In Isolator

VF7004-00

6" Sensor Base
w/Built-In Isolator

Standard Features

- UL Listed
- Designed for use with all DCP analog sensors.
- Built in LED indication upon short circuit condition
- Available in 4 and 6 inch models.
- Contains a security locking tab for tamper protection.

Application

- The VF7003 4" isolator base and VF7004 6" isolator base are designed for use with VES analog style sensors models VF2001, VF2002, VF2005, VF2003, VF2008, VF2010, VF2011 and VF2012.
- Each isolator base is connected to an Elite Signaling Line Circuit (SLC) and provides easy replacement of sensors, without disturbing the wiring.
- The isolator bases contain a simple rugged design with screw terminals for wiring connections. A common mounting base allows sensor interchange and maintains loop continuity when sensors are removed. A simple anti-tamper head Locking system is provided which is enabled by removing a small plastic tab on the back of the sensor. Once locked, the head can only be removed using a small diameter screw driver.

Operation

The VF7003 4" isolator base and VF7004 6" isolator base are designed specifically for use with the VES Analog sensors, models VF2001 Ionization Smoke Sensor, VF2002, VF2005 & VF2011 Photoelectric Smoke Sensor, VF2003 & VF2010 Heat Sensor and VF2008 & VF2012 Multi-Criteria Sensors.

The VF7003 and VF7004 common mounting bases allow for complete compatibility for all of the VES Analog sensors.

Engineering Specifications

The selected sensor shall be attached to the VF7003 or VF7004 base and permit direct interchange between the listed sensors.

The vandal-resistant, security locking feature shall be used in those areas as indicated on the drawing. The locking feature shall be optional and can be implemented when required.

Note: SLC maximum resistance is 50 ohms.



Technical Specifications

Operating Voltage: 17-41 VDC

VF7003-00: 4" Sensor Base

VF7004-00: 6" Sensor Base

Current Consumption: Normal: 160uA
Active: 10mA

Security feature: Plastic Tamper-Lock

Color & Case Material: Bone PC / ABS Blend

Compatible Sensors: VF2001, VF2002, VF2005, VF2003, VF2008, VF2010, VF2011 and VF2012



VF7005-00

6" Analog Low Frequency Sounder Base



Standard Features

- UL268 and UL464 listed
- 520Hz low frequency alarm signal meets NFPA requirements for sleeping areas
- Base learns the sensor address and assumes an upper range address (128-254)

Up to 127 sensors and 127 VF7005s can be used on one SLC loop

Can be alarmed or reset by zone or by individual address

Programmable evacuation codes - Continuous, March, ANSI Temporal patterns

High sound pressure level (85dB SPL at 10 feet)

Support for Temporal 4 when used with VF2014 CO detectors (available in mid 2016)

Application

- The VF7005 Analog Sounder Base is designed for use with Elite analog style sensors models VF2001, VF2002, VF2005, VF2003, VF2008, VF2010, VF2011 and VF2012. Each addressable base is to be connected to a VES DCP Signaling Line Circuit (SLC).

The VF7005 provides a Low Frequency audible alarm in the immediate vicinity. Typical applications are use in hotels, apartments, and hospitals.

The VF7005 has a highly configurable programming algorithm that allows the user to setup groups of bases for synchronization of modulation tones. Each device has 16 states that are programmed with the desired output pattern to be used (e.g., "Temporal" or "March") for each state.

Operation

The VF7005 base is designed specifically for use with the VES Analog sensors, models VF2001 Ionization Smoke Sensor, VF2002, VF2005 & VF2011 Photoelectric Smoke Sensor, VF2003 & VF2010 Heat Sensor and VF2008, VF2012 & VF2014 Multi-Criteria Sensors.

The VF7005 Low Frequency sounder base allows for complete compatibility for all of the VES Analog sensors.

Addressing is automatically provided by the attached Sensor. The device is configurable through Loop Explorer Programming Software.

Engineering Specifications

The Dealer shall furnish and install where indicated on the plans, models VF2001 Ionization Smoke Sensor, VF2002, VF2005 & VF2011 Photoelectric Smoke Sensor, VF2003 & VF2010 Heat Sensor and VF20078, VF2012 & VF2014 Multi-Criteria Sensors.

The base shall permit direct interchange with the models VF2001 Ionization Smoke Sensor, VF2002, VF2005 & VF2011 Photoelectric Smoke Sensor, VF2003 & VF2010 Heat Sensor and VF2008, VF2012 & VF2014 Multi-Criteria Sensors.

Technical Specifications

Operating Voltage: 17-41 VDC

SLC Loop Idle Current: 154 μ A

SLC Loop Max. Alarm Current: 154 μ A

Device Aux. Power Min. Voltage: 16-31 VDC.

Aux. Idle Current: 2.8mA

Aux. Current Consumption (Alarm): 72mA @ 33VDC
95mA @ 24VDC
140mA @ 16VDC

Aux. Current Consumption (Alarm): 92mA @ 33VFWR
149mA @ 24VFWR
203mA @ 16VFWR

Maximum Humidity: 93% RH Non-Condensing

UL Ambient Installation Temp. Range: 32° F to 100° F

Operating Temperature Range: 32° F to 122° F

Sound Pressure Level @ 10': 85 dB

Color & Case Material: Bone PC / ABS Blend

Max. Quantity Per Loop: 127

Dimensions: 6.6" (Diameter), 3.1" (Height)



VF7008-00

6" Analog Sounder Base

Standard Features

- Programmable evacuation codes - Continuous, March, ANSI Temporal patterns
- Base learns the sensor address and assumes an upper range address (128-254)
- Up to 127 sensors and 127 VF7008s can be used on one SLC loop
- Can be alarmed or reset by zone or by individual address
- SLC loop wire resistance = 50 ohms Max. (total SLC wire run length)
- High sound pressure level (85dB SPL at 10 feet)

Application

- The VF7008 Analog Sounder Base is designed for use with Elite analog style sensors models VF2001, VF2002, VF2005, VF2003, VF2008, VF2010, VF2011 and VF2012. Each addressable base is to be connected to a VES DCP Signaling Line Circuit (SLC).
- The VF7008 provides an audible alarm in the immediate vicinity. Typical applications are use in hotels, apartments, and hospitals.
- The VF7008 has a highly configurable programming algorithm that allows the user to setup groups of bases for synchronization of modulation tones. Each device has 16 states that are programmed with the desired output pattern to be used (e.g., "Temporal" or "March") for each state.

Operation

The VF7008 base is designed specifically for use with the VES Analog sensors, models VF2001 Ionization Smoke Sensor, VF2002, VF2005 & VF2011 Photoelectric Smoke Sensor, VF2003 & VF2010 Heat Sensor and VF2008 & VF2012 Multi-Criteria Sensors.

The VF7008 sounder base allows for complete compatibility for all of the VES Analog sensors.

The bases are lightweight and very thin, providing a low profile once installed. The solderless screw terminals enable quick and easy wiring connections.

Addressing is automatically provided by the attached Sensor. The device is configurable through Loop Explorer Programming Software.

Engineering Specifications

The Dealer shall furnish and install where indicated on the plans, models VF2001 Ionization Smoke Sensor, VF2002, VF2005 & VF2011 Photoelectric Smoke Sensor, VF2003 & VF2010 Heat Sensor and VF20078 & VF2012 Multi-Criteria Sensors.

The base shall permit direct interchange with the models VF2001 Ionization Smoke Sensor, VF2002, VF2005 & VF2011 Photoelectric Smoke Sensor, VF2003 & VF2010 Heat Sensor and VF2008 & VF2012 Multi-Criteria Sensors.

The vandal-resistant, security locking feature shall be used in those areas as indicated on the drawing. The locking feature shall be optional and can be implemented when required.



Technical Specifications

Operating Voltage: 17-41 VDC
SLC Loop Idle Current: 110 µA
SLC Loop Max. Alarm Current: 110µ
Device Aux. Power Min. Voltage: 16-31 mA.
Auxiliary Idle Current: 550µA
Maximum Humidity: 93% RH Non-Condensing
UL Ambient Installation Temp. Range: 32° F to 100° F
Operating Temperature Range: 14° F to 122° F
Sound Pressure Level @ 10': 85 dB
Color & Case Material: Bone PC / ABS Blend
Weight: 0.455 lb
Dimensions: 5.9" (Diameter), 1.3" (Height)

Number of bases permitted

# Bases in Alarm	Max. Auxiliary 24VDC Power Wire Resistance (Total Run Length)	# Bases in Alarm	Max. Auxiliary 24VDC Power Wire Resistance (Total Run Length)
127	1.4 ohm	30	6.1 ohm
75	2.4 ohm	20	9.1 ohm
60	3.0 ohm	15	12.2 ohm
50	3.6 ohm	10	18.3 ohm

NOTE: SLC max. resistance is 50 ohms



VF6002-00 & VF6013-00

Fast Response Contact Modules



Back side of a VF6002



VF6013

Standard Features

- Fast, reliable contact monitoring utilizing the VES DCP (Digital Communications Protocol)
- Two different mounting configurations
- 127 devices can be used per DCP loop
- Bi-colored indicating LED provides module status (VF6002 only)
- Single input contact monitor
- Can be programmed to monitor Normally Open (NO) or Normally closed (NC) contacts
- Operates on Class A or Class B SLC loop

Application

- The VES Contact Modules are designed to be used with pull stations, water flow switches, and other applications requiring the monitoring of dry contact alarm initiating devices.
- The interrupt driven Digital Communications Protocol (DCP) combines maximum communication reliability and fast response to emergency conditions.

- Two different mounting configurations are provided to meet a wide range of applications. The contact monitoring module does not require a separate 24 VDC power source.
- The VF6013 is a small package design and is suitable for mounting in a small junction box behind a pull station or other monitored device. The VF6013 comes with attached pigtail wiring, giving the installer maximum flexibility. The VF6002 is mounted to a cover plate for a 4" square or double gang junction box. It comes with a visible bi-colored indicating LED to provide module status.

Operation

Each addressable contact module is programmed with its own unique Signaling Line Circuit (SLC) loop address.

The address of the contact module is electrically programmable and stored in onboard EEPROM. Up to 127 devices can be placed on the VES DCP SLC loop. The module supervises the wiring to the contact with an End Of Line (EOL) resistor. It can be programmed to monitor normally open (NO) or normally closed (NC) contacts. If a fault condition occurs in the wiring, the module sends a trouble status signal to the Elite fire alarm control panel.

When a change of status is sensed by the contact module, it sends an interrupt to the Elite control panel indicating that an alarm has occurred.

After addressing, Contact Modules are fully configurable through Loop Explorer programming software.

Technical Specifications

Operating Voltage DCP Powered Loop: 17-41 VDC

Average Current Consumption: 550µA (typical)

Alarm Current: 30mA

UL Ambient Installation Temperature Range:
32° F to 120° F

Maximum Humidity: 90% RH Non-Condensing

Dimensions:

VF6002: 4.2" W x 4.7" H x 1.4" D

VF6013: 2.8" W x 1.8" H x 0.7" D



VF6020-00 & VF6021-00

with Short Circuit Isolator

Fast Response Contact Modules (Class A Wiring)

Standard Features

- Single input contact monitor
- Fast, reliable contact monitoring utilizing the DCP (Digital Communications Protocol)
- Two different mounting configurations
- 127 devices can be used per DCP loop
- Bi-colored indicating LED provides module status (Both Models)
- Yellow LED indicates a short circuit condition (VF6021-00 only)
- Can be programmed to monitor Normally Open (NO) or Normally Closed (NC) contacts in Class B
- Operates on Class A or Class B SLC loop
- Accepts up to 14 AWG wire

Operation

The VES VF6020 and VF6021 Fast Response Contact Monitoring Modules are designed to be used with pull stations, water flow switches, and other applications requiring the monitoring of dry contact alarm initiating devices. The interrupt driven Digital Communications Protocol (DCP) combines maximum communication reliability and fast response to emergency conditions. Two different mounting configurations are provided to meet a wide range of applications. The VF6020 and VF6021 contact monitoring module does not require a separate 24 VDC power source.

Each addressable contact monitoring module is programmed with its own unique Signaling Line Circuit (SLC) loop address. The device address is electrically programmable and stored on onboard EEPROM. Up to 127 devices can be placed on the DCP SLC loop. The module supervises the wiring to the contact with an End Of Line (EOL) resistor in Class B mode. It can be programmed to monitor Normally Open (NO) or Normally Closed (NC) contacts. If a fault condition occurs in the wiring, the module sends a trouble status signal to the fire alarm control panel. When a change of status (contact changes state) is sensed by the VF6020 and VF6021, it sends an interrupt to the Fire Alarm Control Panel indicating that an alarm has occurred. VF6021-00 version has built-in integrated SCI circuitry. In the event of a short on the S-SC line, the SCI circuit will activate and its yellow LED indicator will be turned on steady and the module will report the short circuit condition to the Fire Control Panel.



Back side of a VF6020



Back side of a VF6021

Technical Specifications

Supply Voltage Nominal: 25.3-39VDC

Average Current Consumption: 630 μ A (Typical), 6.3mA (Alarm)

SCI on Resistance: 40 ohm Mx. (normal condition)

SCI Fault Detection Threshold: 12 Volts (Typical)

SCI Isolation Current (short circuit condition): 10mA (Typical)

Maximum Quantity per Loop: 127

Dimensions: 4.2" W x 4.7" H x 1.4" D

Mounting: 4" square electrical box

Relative Humidity: 90% RH Non-Condensing

UL Ambient Installation Temperature Range: 32° F to 120° F



VF6024-00

Fast Response Contact Modules



Standard Features

- Single input contact monitor
- Fast, reliable contact monitoring utilizing the DCP (Digital Communications Protocol)
- 127 devices can be used per DCP loop
- Can be programmed to monitor Normally Open (NO) or Normally Closed (NC) contacts
- Operates on Class A or Class B SLC loop
- Accepts up to 14 AWG wire

Operation

The VF6024 Fast Response Contact Monitoring Modules are designed to be used with pull stations, water flow switches, and other applications requiring the monitoring of dry contact devices. The interrupt driven Digital Communications Protocol (DCP) combines maximum communication reliability and fast response to emergency conditions. The VF6024 contact monitoring module does not require a separate 24 VDC power source.

Each addressable contact monitoring module is programmed with its own unique Signaling Line Circuit (SLC) loop address. The device address is electrically programmable and stored in onboard EEPROM. Up to 127 devices can be placed on the DCP SLC loop. The module supervises the wiring to the contact with an End Of Line (EOL) resistor. It can be programmed to monitor Normally Open (NO) or Normally Closed (NC) contacts. If a fault condition occurs in the wiring, the module sends a trouble status signal to the fire alarm control panel. When a change of status (contact changes state) is sensed by the VF6024 it sends an interrupt to the control panel indicating that an alarm has occurred.

Technical Specifications

Supply Voltage (S-SC): 25.3-39 VDC

Average Current Consumption: 339 μ A (Typical), 358 μ A (Alarm)

Programmable Input: 1 Monitoring Inputs

EOL Device: 10K Ohms Resistor

Max. Quantity per Loop: 127

Dimensions: 1.75" W x 2.37" H x 0.5" D

Maximum Humidity: 90% RH Non-Condensing

UL Ambient Installation Temperature Range: 32° F to 120° F

Mounting: 2" electrical box



VF6003-00

Short Circuit Isolator

Standard Features

- Can be placed at any location on SLC loop
- Checks the line for short circuit at power up; if the line is normal, the relay will be returned on. If a line short is detected, the relay remains open
- Indication of short circuit by a yellow LED

Application

- The VES VF6003 Short Circuit Isolator provides the capability of allowing NFPA SLC Style 7 installations.

Operation

Class A Configuration Wiring:

The **VF6003** short circuit isolator should be located between any devices on the SLC loop. In the event of a short on the SLC loop, the two adjacent isolators (closest isolators to the left and right of the shorted section) will activate and their respective LED indicators will be turned on. All devices between the active short circuit isolators will be dead. This will prevent an entire loop failure.

Upon removal of the short condition, the **VF6003** devices will automatically restore the entire loop to the normal operating state.

Class B Configuration Wiring:

The **VF6003** short circuit isolator should be located between any devices on the SLC loop. In the event of a short on the SLC loop, an isolator closest to the shorted section will activate and the LED will be turned on. **All the devices beyond the shorted section will be disabled.**

Upon removal of the short condition, the VF6003 will automatically restore the entire loop to the normal operating state.

For the best performance, use class A configuration.



Back side of a VF6003

Technical Specifications

Absolute Max. Applied Voltage: S, SC 41 VDC

Supply Voltage Nominal: S, SC 33VDC

Normal Current Consumption: 270 μ A

Active Current Consumption (Short Circuit Condition): 10mA

Dimensions: 4.2" W x 4.7" H x 1.4" D

Maximum Humidity: 90% RH Non-Condensing

UL Ambient Installation Temperature Range: 32° F to 120° F

Weight: 1.4 oz

Visual Indicator (Yellow Status LED)

Normal condition: No indication

Active (short) condition: On Steady

SLC Maximum Resistance: 50 ohms



VF6004-00

Supervised Output Module



Back side of a VF6004

Standard Features

- Flexible application
- Quick response to emergency conditions
- Operation parameters are maintained by the module, and individual communication with the control system during emergency conditions is not required
- Contacts are rated 2.0 Amps @ 30VDC.
- Programming is highly flexible providing 16 priority states plus zoning capability.

Program status:

- LED will flash red or green.
- Programmed device output is turned off, silenced, or programmed to modulate pattern.

Application

- The Supervised Output Module, VF6004, has been designed to provide application flexibility and quick response to emergency conditions. Flexibility is provided by a wide range of operating modes, including supporting multi-zone operations, and/or functions, up to 16 different modulation patterns and multi-state programming.

- The operating parameters for the VF6004 are maintained by the module and do not require individual communication with the control system during emergency conditions to operate. The control panel simply broadcasts system conditions on the Signaling Line Circuit (SLC) and the VF6004s do the rest based upon the custom configuration.
- Each VF6004 provides a Class B Individual Circuit rated for 2.0 Amp @ 30 VDC. Each VF6004 also requires a 24 Volt power source in addition to the SLC.
- Provide software controlled LED indication: blinks green or red when polled, or can be latched on.

Operation

The VES Supervised Output Module, VF6004 is designed for use on the Elite analog addressable system. Up to 127 devices can be placed on a single SLC loop. The device address is uniquely stored on an onboard EEPROM.

The module allows the panel to control and monitor for circuit integrity and output functions as defined.

The interrupt driven Digital Communication Protocol (DCP) combines maximum communication reliability and fast response to emergency conditions. The module has a single bi-colored LED to indicate device status.

It fits into a standard 4" square or double gang electrical back box.

After addressing, Supervised Output Modules are fully configurable through Loop Explorer programming software.

Technical Specifications

Operating Voltage: 17-41 VDC

Average Current Consumption:
220µA (typical), 300µA (max.)

Aux Supply Voltage Nominal: 18-30V

Current Consumption on Aux Power Lines: 18-30V

Operating Temperature Range: 32° F to 120° F

Relative Humidity: 90% RH Non-Condensing

Dimensions: 4.2" W x 4.7" H x 1.4" D

Mounting: 4" Square electrical box



VF6040-00 & VF6041-00

with Short Circuit Isolator

Supervised Output Modules (Class A Wiring)

Standard Features

- Built-in SCI circuitry (VF6041-00 only)
- Flexible application
- Quick response to emergency conditions
- Operation parameters are maintained by the module, and individual communication with the control system during emergency conditions is not required
- Contacts are rated 2.0 Amps @ 24VDC
- Programming is highly flexible providing 16 priority states plus zoning capability
- Programmed device output is turned off, silenced, or programmed to output the selected pattern

Operation

The Class A Supervised Output Modules (DCP-SOM-A & SOM-AI) have been designed to provide application flexibility and quick response to emergency conditions.

Flexibility is provided by a wide range of operating modes, including supporting multi-zone operations, and/ or functions, up to 16 different modulation patterns and multi-state programming. The operating parameters for the DCP-SOM-A & -AI are maintained by the module and do not require individual communication with the control system during emergency conditions to operate.

The control panel simply broadcasts system conditions on the Signaling Line Circuit (SLC) and the DCP-SOM-A & -AI modules do the rest based upon the custom configuration. Each DCP-SOM-A & -AI provides a single Class B or Class A circuit rated for 2.0 Amps @ 24 VDC. Each DCP-SOM-A & -AI also requires a 24 VDC power source in addition to the SLC.



Back side of a VF6040



Back side of a VF6041

Technical Specifications

Supply Voltage Nominal: 25.3-39VDC

Auxiliary Supply Voltage: 24 VDC

Average Current Consumption:

VF6040:420 μ A (Typical),

VF6041:220 μ A (Typical)

On S-SC Line: Maximum 6mA (Alarm)

Current Consumption on Auxiliary Power Lines: 50 μ A (Typical)

SCI on Resistance: 40 ohm Mx. (normal condition)

SCI Fault Detection Threshold: 12 Volts (Typical)

SCI Isolation Current (short circuit condition): 10mA (Typical)

Maximum Quantity per Loop: 127

Dimensions: 4.2" W x 4.7" H x 1.4" D

Mounting: 4" square electrical box

Relative Humidity: 90% RH Non-Condensing

Ambient Temperature Range: 32° F to 120° F



Dual Relay Modules

VF6052-00

Low Voltage

VF6053-00

Low Voltage w/Isolator

VF6054-00

High Voltage

VF6055-00

High Voltage w/Isolator



Back side of a VF6052



Back side of a VF6053

Standard Features

- Provides two independently configurable Form C contacts per address
- Contacts are rated as follow:
VF6052/ VF6053: 2A @ 30VDC / 0.5A @ 120 VAC
VF6054/ VF6055: 8A @ 30VDC / 4.8A @ 250 VAC
- Up to 127 devices can be used on each SLC loop
- Visible Bi-colored LED is software controlled and can be programmed to blink red or green when polled. The LED can be latched on when activated. (For All Models)
- Yellow LED indicates a short circuit condition (VF6053 & VF6055 only)
- Programming is highly flexible providing 16 priority states plus zoning capability
- Operates on Class A or Class B SLC loop

Operation

The Dual Relay Modules have been designed to provide flexible and quick response to emergency conditions. The VES Series allows independent control of two form C contacts for a variety of normally open and normally closed contact applications such as fan operation, elevator recall, door closure, and auxiliary notification.

Each VES Series module provides independent control of two Form C contacts while utilizing one SLC (Signaling Line Circuit) address. The modules have a highly configurable programming algorithm that allows the user to set up groups of devices (zoning) for simultaneous operation of multiple VF6052, VF6053, VF6054, VF6055 modules. The operating parameters are maintained by the module and do not require individual communication with the control panel during the emergency condition to operate. The control panel broadcasts the control command on the SLC loop and the VES Series modules do the rest based on their custom configuration. Since mechanically latching relays are used within the VES Series modules, a separate 24VDC power source is not required.

Technical Specifications

Supply Voltage Nominal: 25.3-39 VDC

Average Current Consumption: 350 μ A (Typical), 405 μ A (Alarm)

Contacts: 2 Independently Controlled Form C

VF6052/VF6053: 2A @ 30 VDC/ 0.5A @ 120 VAC

VF6054/VF6055: 8A @ 30 VDC/ 4.8A @ 250 VAC

SCI on Resistance: 40 ohm Mx. (normal condition)

SCI Fault Detection Threshold: 12 Volts (Typical)

SCI Isolation Current (short circuit condition): 10mA (Typical)

Maximum Quantity per Loop: 127

Dimensions: 4.2" W x 4.7" H x 1.4" D

Mounting: 4" square electrical box

Relative Humidity: 90% RH Non-Condensing

UL Ambient Installation Temperature Range: 32° F to 120° F

VF6007-00

Dual Input Monitor Module

Standard Features

- Fast, reliable contact monitoring utilizing the VES DCP (Digital Communications Protocol)
- 127 devices can be used per DCP loop
- Bi-colored indicating LED provides module status
- Dual input contact monitor
- Can be programmed to monitor Normally Open (NO) or Normally Closed (NC) contacts
- Operates on Class A or Class B SLC loop
- Accepts up to 14 AWG wire
- Mounts to 4" square gang box

Application

- The VES VF6007 provides installing dealers an economical approach to monitor devices in the same proximity, such as water flow and valve supervision on the same interface device.
- This capability when coupled with VES's SIA DACT transmission provides sub-point reporting for complete annunciation and accurate reporting to responders and users.
- VES's reporting approach is superior in that the capability to accurately report dissimilar inputs, such as alarm and supervisory are present.

Operation

The VES Dual Monitor Module (VF6007) is designed for use on the Elite analog addressable system. It provides two independent contact monitoring circuits while only utilizing one address on the SLC loop.

Up to 127 devices can be placed on a single SLC loop. The device address is uniquely stored on an onboard EEPROM. The module can be programmed to monitor normally open (NO) or normally closed (NC) contact fire alarm and supervisory devices.

The interrupt driven Digital Communication Protocol (DCP) combines maximum communication reliability and fast response to emergency conditions.

The module has a single bi-colored LED to indicate device status.

It fits into a standard 4" square or double gang electrical back box.



Back side of a VF6007

Technical Specifications

Operating Voltage: 17-41 VDC
Average Current Consumption: 600µA (typical)
Alarm Current: 30mA
Operating Temperature Range: 32° F to 120° F
Maximum Humidity: 90% RH Non-Condensing
Dimensions: 4.2" W x 4.7" H x 1.4" D
Mounting: 4" square electrical box



VF6006-00

Solenoid Releasing Module



Back side of a VF6006

Standard Features

- Solenoid output with supervision for open and short circuit conditions. Check on supervised status occurs upon receipt of an A-D command
- Output relay rated to supply 2A @ 30 VDC for the solenoid load
- Addressable FET switch used to control output for extra security in releasing functions
- Activation pulse time from 5-30 minutes in 5 minute intervals
- Visible Bi-colored LED is software controlled and is Red when the Module is active and Green when normal. The LED can be latched on when activated
- Programmed with DCP expansion mode commands or with a handheld programmer

Application

- This module will be connected to a SLC loop on an Elite FACP with Networked Releasing. The VF6006 will provide a supervised 24 VDC output to a fire alarm releasing solenoid or squib agent (reverse current relay) release supervision circuit.
- There are separate wiring terminals provided for both the Solenoid and Agent Release Module (ARM) devices. Although there are two sets of terminals, this module can only be used for one type at a time. The ARM end-of-line (EOL) resistor must be removed when used with a solenoid. A panel command allows the user to choose which type of device is being controlled and supervised. In the event of an alarm condition, the module will be activated to supply up to 2 amps of current to the solenoid or ARM devices. The solenoid activation time is programmable at the control panel. Solenoid activating pulse time can be programmed from 5-30 minutes in 5 minute intervals. The output can also be latched on until commanded to be turned off by the control panel.

Technical Specifications

Absolute Max. Applied Voltage:

S, SC: 41 VDC
Aux+, Aux-: 26 VDC

Supply Voltage Nominal:

S, SC: 33 VDC
Aux+, Aux-: 24 VDC

Normal Current Consumption (S, SC): 220µA

Max. Current Consumption (S, SC): 300µA

Normal AUX+, AUX- Consumption: 1.2mA

Max. Output Current to SOL+, SOL-: 2A @ 30VDC

End Of Line Device: 2.7K Ohms

Dimensions: 4.2"W x 4.7"H x 0.85"D

Ambient Temperature: 32° F to 120° F

Humidity: 90 % RH, Non-condensing

Mounting: 4" Square electrical box

Operation

The VF6006 Solenoid Releasing Module is designed to control a single hazard when connected to the Elite SLC loop. Multiple Releasing Modules may be attached to the loop, controlling different areas, all triggered by the same event.

Alarm events may be on different panels in a networked system and the NAC outputs may also be used for releasing. Events that trigger a NAC channel and Releasing Module all have the same output command.



VF6011-00

Conventional Zone Module

Standard Features

- Provides an address point for a zone of up to 25 conventional smoke detectors
- Blinks green when polled. Latched on red (controlled by panel) when activated
- Device address can also be programmed with a handheld programmer. Device address- ranges from 1 to 127
- Compatible with Class B (Style B) and Class A (Style D) wiring
- Auxiliary power source provides power for the zone of detectors
- Compatible with conventional VES detectors

Application

The VF6011 provides installing dealers with the ability to upgrade locations on a phased approach or monitor a zone of conventional detectors.

This capability is key to satisfying customer needs for a system upgrade over time, and allows a best case application of technology to match the upgrade with the customer's budget.

All sensors may be monitored by the same Elite Panel during the upgrade, reducing the potential confusion of "old and new" panel alarms.

Operation

The VF6011 is designed for use on the Elite analog addressable system. Up to 127 devices can be placed on a single SLC loop. The device address is uniquely stored on an onboard EEPROM.

The module allows the panel to interface and monitor two-wire conventional detectors. Each VF6011 transmits the status of one zone of devices (25 maximum per zone) back to the panel.

The VF6011 supervises the power supply as well as the entire zone of devices. Status conditions are reported as normal, open or alarm. All 2-wire smoke detectors must be UL listed as compatible to be interfaced with the VF6011.

The interrupt driven Digital Communication Protocol (DCP) combines maximum communication reliability and fast response to emergency conditions. The module has a single bi-colored LED to indicate device status.

It fits into a standard 4" square or double gang electrical back box.

After addressing, Conventional Zone Modules are fully configurable through Loop Explorer Programming Software.



Back side of a VF6011

Technical Specifications

Operating Voltage: 17-41 VDC

Average Current Consumption (from S-SC): 400µA (typical quiescent)

Aux Supply Voltage Nominal: 18.8-27.2 V

2 Wire Detector Loop Current Standby Det. Load: 1mA

EOL Device: 4.7K Ohms

Data Transmission Current Temp. Range: 22mA ± 20%

Operating Temperature Range: 32° F to 120° F

Alarm Threshold Level: <1.5K Ohms

From Aux Supply Alarm (Short across det. line): 60mA

Max. 2-Wire Conventional Det. Loop Resistance: 50 Ohms (total SLC Length)

Open Circuit Threshold Level: >10K ohms

VF9000-00

Hand Held Programmer



Display Messages

bAt - On upon power up (battery check). Also on when battery is low. Low battery good for up to 3,000 address setting operation

E0 - Attempting to set an address beyond 127

E1 - Attempting to program an address with no device connected

E2 - Can not find device after power up

E3 - Invalid sensor response

E4 - Can not find the device program

E5 - Device read error

E6 - Fail during Analog value reading

Standard Features

- Compact unit
- Easy to use
- Provides address setting and reading
- Can be used on both sensors and modules
- Has the diagnostic ability to display the analog value
- Over 8000 address settings from one battery

Application

- The Hand Held Programmer is designed for use with all analog sensors and modules.

Address Setting

1. Install sensor onto programmer, ensuring that sensor protrusions align with programmer grooves.
2. Press the left gray button to switch programmer on. A battery check message will appear followed by the device's address (Unprogrammed sensors will read address 127).

3. Set the required address by incrementing the left and right gray buttons (the display will show three red flashing dots if the address being programmed is different from the device's current address).

4. When the desired address is present, press the red button to store that address. The three red dots on the display will no longer be present.

Programming Buttons

Left Gray Button

Power on. Automatically reads the address of a sensor. Subsequent operations will advance the device address by ten.

Right Gray Button

Power off. Advances the device address by one.

Red (newer models will be Blue) Button

Stores the displayed address to the device and is used to read sensor analog levels.

Testing A Sensor

Note: Ionization sensors require a 30 second stabilization period before analog value reading should be taken.

1. Install the sensor and power up programmer
2. Press the "Red" button. An "A" will appear on the display followed by the analog value. The value will be continuously updated for three minutes
3. The photoelectric sensor should have a value displayed of between 56-63. The ionization sensor should have a value displayed of between 52-73.

Values out of these ranges indicate that the sensor chamber has become contaminated.

Technical Specifications

Rated Voltage: 9 VDC

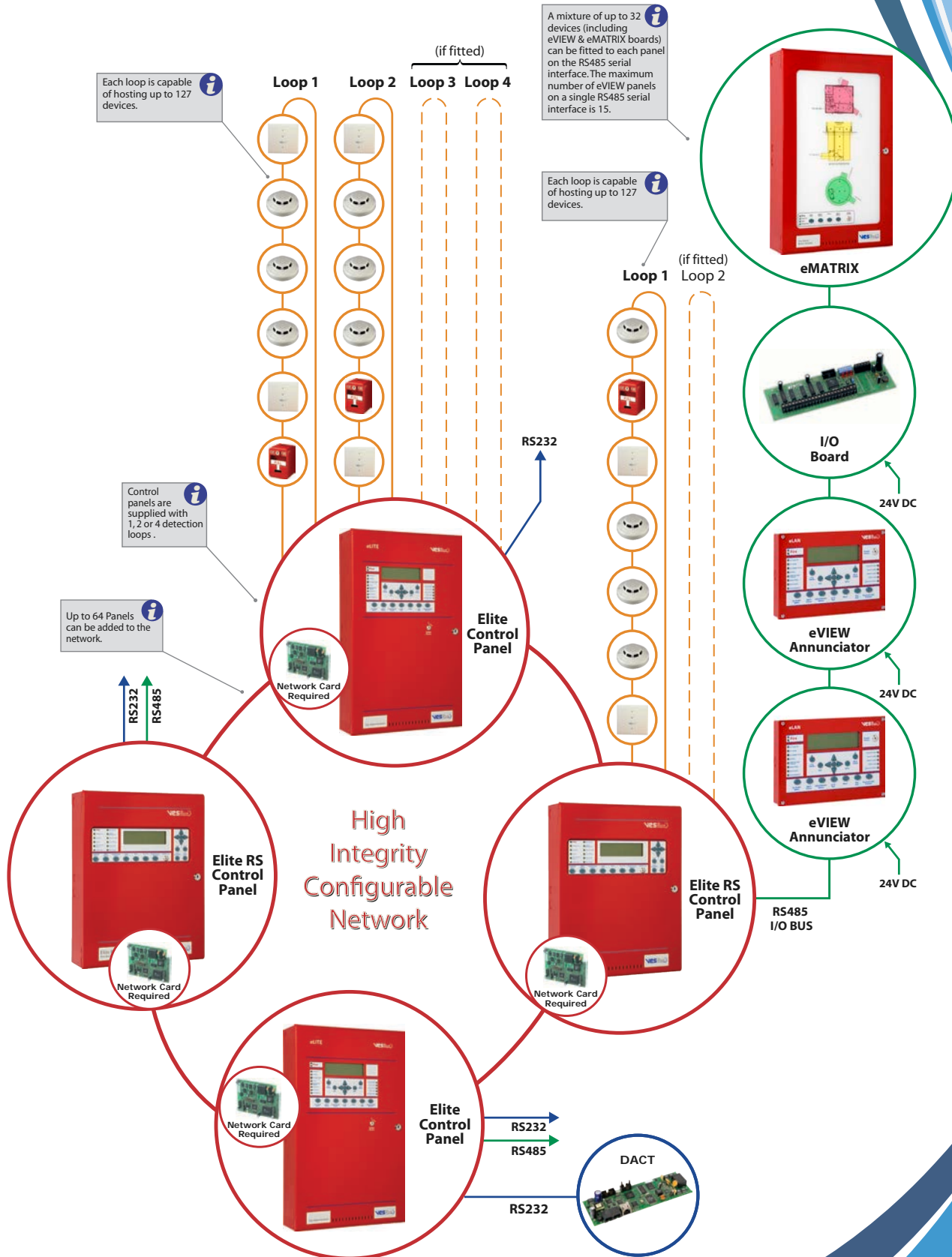
Battery: 9 VDC

Weight: 0.34lbs

Length: 6 1/4"

Color: White

Elite - Network System Schematic



Releasing Fire Control Panels



Elite XT
Releasing Fire Control Panels

Pages 54-55



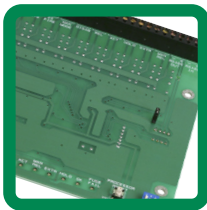
Elite Si
Status Indicators

Pages 56-57



**Elite Abort
Switch**

Pages 56-57



**Elite XT
Ancillary PCB**

Pages 56-57

Elite XT

Releasing Fire Control Panels



Standard Features

- UL 864 and FM approved
- Three detection zones as standard
- Any single zone or any combinations of zones can be configured to release
- Configurable first stage NAC delays
- Configurable detection delays
- Zero time delay upon manual release option
- Non-latching zone input option to receive signals from other systems such as aspirating equipment
- Configurable releasing delays up to 60 seconds in 5 second steps
- Configurable releasing duration up to 5 minutes in 5 second steps
- Countdown timer shows time remaining until release
- Supports up to seven, four wire status indicators
- Built in Extract Fan control
- Compatible with conventional detectors from Apollo, Hochiki America and System Sensor

Product Overview

- Designed and manufactured to the highest standards in a quality controlled environment and with UL and FM approvals, the Elite XT releasing panel offers outstanding value and performance for all small to medium fixed firefighting installations.
- With three detection zones as standard, release can be configured to activate from any combination of detection zone inputs to allow (among other combinations) any two from three type activations such as would be required for detection in ceiling void, room and floor void applications.
- The extensive configuration options of the Elite XT allow the functionality of the system to be extensively modified.
- The panel contains a large LED display to enable easy configuration and control which also displays the time remaining until release for added user safety.
- The countdown timer is duplicated on up to seven remote status units to provide local indication of the system status.
- With all of the electronics mounted on a single, easily removable, steel plate Elite XT panels are both robust and easy to install.
- Elite XT is supplied in an enclosure that matches the design and color of the Elite CP range and is available in standard red or optional gray.

Programmable Functions

Access Level 2

- Test Zones 1 to 3
- Disable Zones 1 to 3
- Disable 1st Stage Alarms
- Disable Pre-activated 1st Stage Relay
- Disable Pre-activated 2nd Stage Relay
- Disable Extract Fan Output
- Disable Manual Release Input
- Disable Releasing Sub System
- Activate Extract Fan Output
- Activate Alarm Delays

Access Level 3

- Sounder Delay
- Coincidence Detection
- Disable Panel Features
- Zone Alarm Delays (Detectors)
- Zone Alarm Delay (Call stations)
- Configure Zone for I.S Barrier Use
- Zone Short Circuit Alarm
- Zone Non Latching
- Zone Inputs Delay
- Extinguishant Release Time Delay
- Extinguishant Release Duration Timer
- Extinguishant Reset Delay Timer

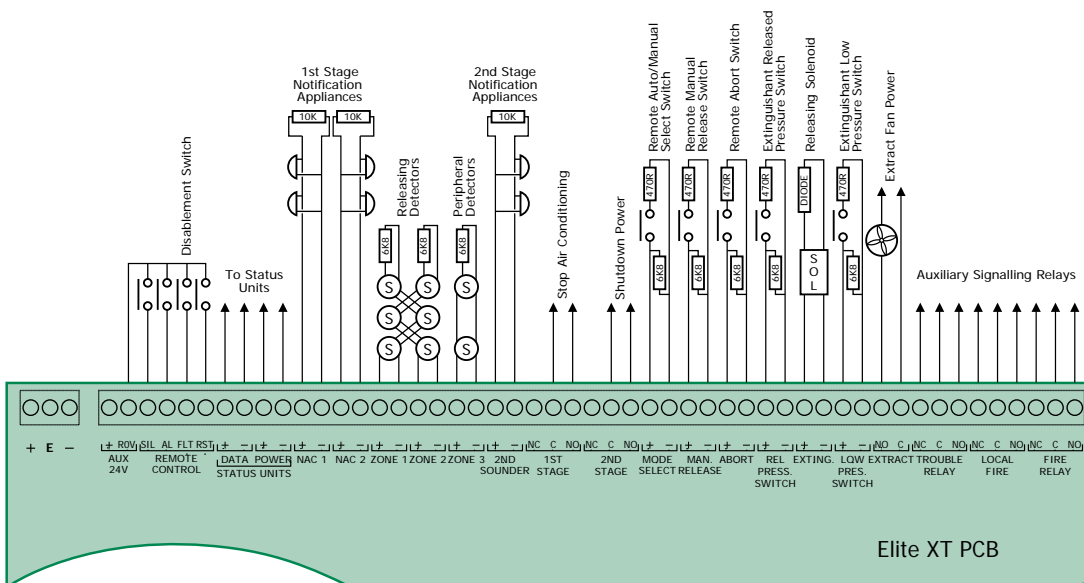


Technical Specifications

Mains supply: 115V AC or 230V AC	Terminal capacity: 12 AWG
Mains supply fuse: 3.15 Amp (F3.15A L250V)	No. of detectors per zone: Dependent on type (maximum 32)
Finish: Epoxy powder coated	Detection circuit end of line: 6K8 5% ½ Watt resistor
Color: Red (optional gray)	Supervised input end of line: 6K8 5% ½ Watt resistor
Power supply rating: 3 Amps total including battery charge 28V +/- 2V	Sounder circuit end of line: 10K 5% ¼ Watt resistor
Maximum ripple voltage: 200 millivolts	Extinguishant output EOL: 1N4004 Diode
Battery type: Two 12 Volt 7Ah sealed lead acid in series	No. of detection circuits: 3
Battery charge voltage: 27.6VDC nominal (temperature compensated)	No. of sounder circuits: 2 x 1st Stage, 1 x 2nd Stage
Battery charge current: 0.7A maximum	Extinguishant release output: Rated at 1 Amp
Battery fuse: 20mm, 3.15A glass Sloblow	Extinguishant release delay: Adjustable 0 to 60 seconds (in 5 second steps)
Maximum current draw from batteries: 3 Amps	Extinguishant release duration: Adjustable 60 to 300 seconds (in 5 second steps)
Quiescent current of panel in mains fall: 0.095A	Normal Zone Impedance (EOL): 6.8K
Aux 24V output: Fused at 500mA with electronic fuse	Detector Alarm Impedance: 470 Ohm
NAC outputs: 24V Fused at 500mA with electronic fuse	Pull Station Alarm Impedance: 270 Ohm
Trouble relay contact rating: 30VDC 1A Amp maximum	Short circuit threshold: Short circuit Impedance 99 Ohms
Fire relay contact rating: 30VDC 1A Amp maximum	Supervised Inputs Normal Impedance (EOL): 6.8K
Local fire relay contact rating: 30VDC 1A Amp maximum	Supervised Inputs Alarm Impedance: 470 Ohm
First stage contact rating: 30VDC 1A Amp maximum	Supervised inputs Short circuit threshold: 99 Ohms
Second stage contact rating: 30VDC 1A Amp maximum	Status unit/Ancillary board connection: Two wire RS485 connection
Extract contact rating: 30VDC 1A Amp maximum	Status unit power output: Rated at 500mA with electronic fuse
Zone quiescent current: 2mA maximum	

Ordering Codes

Part number	Description
VF1810-10	Elite XT - Red 115V
VF1810-11	Elite XT - Red 230V
VF1810-40	Elite XT - Gray 115V
VF1810-41	Elite XT - Gray 230V



Elite Status Indicators & Ancillary PCB

Elite Abort Switch

Releasing System Status Indicators



Part No. VF1821-13



Elite Abort Switch
Part No. VF1823-10



Part No. VF1890



Disabling Switch
Part No. VF1832-10

Elite Status Indicators Features

- UL 864 and FM approved
- High brightness LEDs
- Detailed indication of the status of the control panel
- Supervised data connection
- Countdown timer shows time remaining until release
- Manual only and Automatic & Manual mode select keyswitch option
- Four wire connection (data and power)
- Robust, high quality enclosure
- Easy access to terminals
- Remote Abort input (supervised)
- Internal trouble diagnosis indicators

Ancillary PCB Features

- Two wire serial connection
- Up to 7 per system
- Volt free relay outputs for fire and releasing system status
- Relay operated LED indicators

Disabling Switch Features

- Key removable in either position
- Both sides of solenoid circuit are mechanically disabled during activation
- Disabling illuminated at panel when active

Elite Status Indicators Product Overview

- The Elite Status indicators range of status indicators provide detailed status information for Elite XT releasing control equipment.
- All models provide high brightness, LED indication of Manual Only, Automatic and Manual, Abort operated, Disabled, Imminent and Released conditions.
- For systems where local control of the Automatic/Manual mode control are required, units are available with these controls fitted.
- All models have supervised inputs for the remote connection of abort switches.
- All units contain a large, LED display which shows a countdown of the time remaining until release in seconds.

Ancillary PCB Product Overview

- The Elite XT Ancillary Board is compatible with all Elite XT control panels.
- The board provides volt free normally open contacts allowing control of sub-systems and plant remotely from the main panel over a two wire data bus.
- Ancillary boards require only a two core data cable from the main control panel and a two core power cable from the main panel.
- Up to 7 Ancillary boards can be connected to a control panel and each is allocated an address from 1 to 7 using a binary coded DIL switch. The total length of the data cable from the main panel to the last Ancillary board must not exceed 4000 feet.
- A mixture of status units and Ancillary boards, up to a maximum of 7 of each type, can be connected to the serial data bus.

Abort Switch Product Overview

- The Elite Abort switch connects to the Abort terminals of the Elite XT releasing panel. Any number of Elite Abort switches may be connected to the circuit. The last switch must have the end of line device from the Abort circuit terminals of the Elite XT releasing panel fitted across its connections to provide open and short circuit supervision.
- The unit is supplied mounted to a rugged steel enclosure but may also be flush mounted to a single gang electrical box.

Elite Status Indicators Technical Specifications

Size: 7.3" (W) x 5.2" (H) x 1.9" (D)
Power Supply: 21 to 30 V DC
Maximum current draw: 0.07A
Max. number of status units: 7
Quiescent current: 0.033A
Cable capacity: 12 AWG
Supervised inputs end of line resistor: 6K8 0.5W Resistor
Supervised inputs normal impedance: 6.8K
Supervised inputs trigger impedance: 470 Ohms
Supervised inputs short circuit threshold: 99 ohms to 0 ohms
Data connection: Two wire RS485 connection (max 4000 feet)

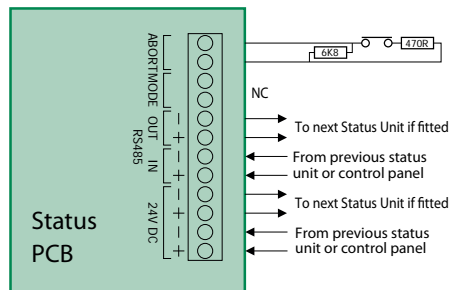
Ancillary PCB Technical Specifications

Size (PCB only): 6.1" (W) x 5.35" (H)
Size (Boxed PCB): 15.1" (W) x 12.2" (H) x 3.54" (D)
Construction (Boxed): 18 AWG mild steel
Supply voltage: 20-30V DC
Contact ratings: 30V DC 1 Amp
Cable capacity: 12 AWG
Operating temperature: 23°F to 122°F
Operating humidity: <95% (non condensing)

Abort Switch Technical Specifications

Size: 3.81" (W) x 3.81" (H) x 2.32" (D)
Color: Standard red or gray
Switch rating: 1A at 30V DC
Trigger resistor: 470R 1W
End of line resistor: 6K8 1/2 W

Manual Only	<input type="radio"/>
Auto/Manual	<input type="radio"/>
Abort Activated	<input type="radio"/>
Disabled	<input type="radio"/>
Imminent	<input type="radio"/>
Released	<input type="radio"/>



Ordering Codes

Part number	Description
VF1821-11	6 lamp status indicator surface mount - red
VF1821-41	6 lamp status indicator surface mount - gray
VF1821-12	6 lamp status indicator flush mount - red
VF1821-42	6 lamp status indicator flush mount - gray
VF1821-13	6 lamp status indicator with mode select keyswitch surface mount - red
VF1821-43	6 lamp status indicator with mode select keyswitch surface mount - gray
VF1821-14	6 lamp status indicator with mode select keyswitch flush mount - red
VF1821-44	6 lamp status indicator with mode select keyswitch flush mount - gray
VF1822-00	Elite Ancillary Board
VF1822-10	Elite Ancillary Board with cabinet - red
VF1822-40	Elite Ancillary Board with cabinet - gray
VF1823-10	Elite Extinguishing Abort switch surface mount - red
VF1823-40	Elite Extinguishing Abort switch surface mount - gray
VF1832-10/ -40	Disabling Switch (red/ gray)

Conventional Fire Control Panels



Elite CP
Conventional Fire Control
Panels

Pages 60-61



Elite CP
Conventional Fire Control
Annunciator

Pages 62-63



**Photoelectric Smoke
Sensors**

Pages 64-69



**Photoelectric/
Heat Sensors**

Pages 70-73



**Fixed Temperature
Heat Sensor**

Page 74



Sensor Bases

Page 75

Elite CP

Conventional Fire Control Panels

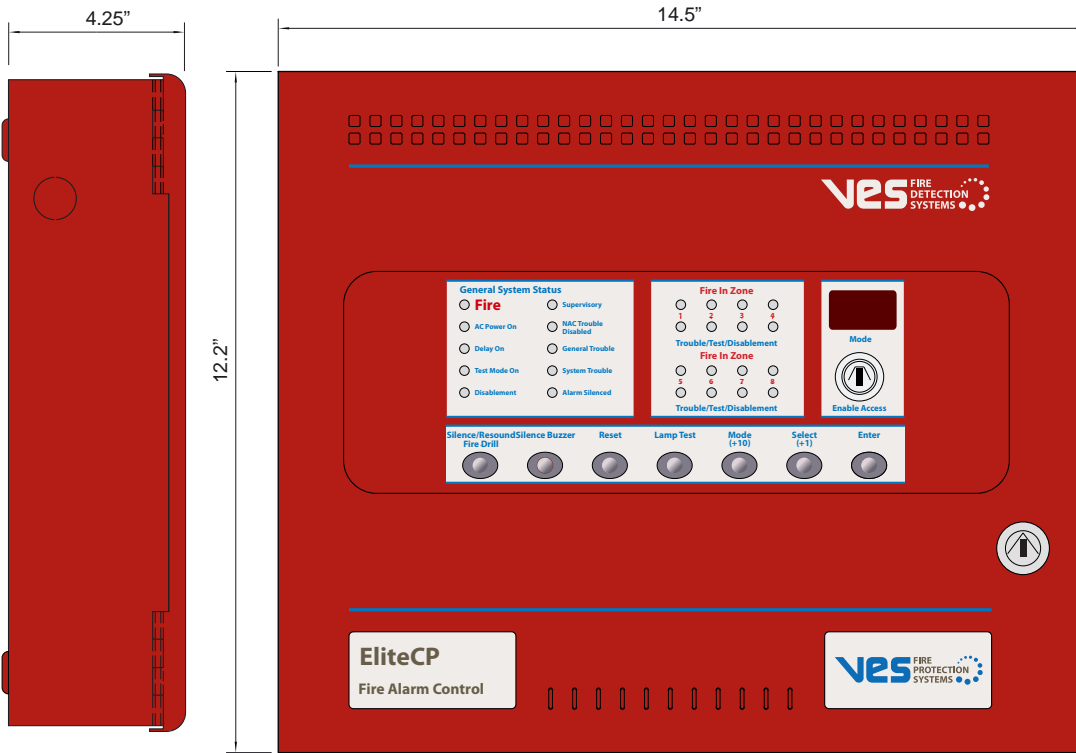


Standard Features

- UL864 approved
- Two, four or eight initiating circuits
- Initiating circuits individually configurable as Fire, or Supervisory
- Two 2.5A Notification Appliance Circuits
- 4.0 Amps total NAC power available
- Selectable NAC sync protocols
- 5 Amp power supply
- Alarm verification selectable by zone
- Resettable Aux power output rated at 0.3A
- Aux power configurable to power off on Fire condition
- Fire, Trouble and Supervisory relays
- Single person walk test function
- Many advanced configuration options
- 24 hour standby with 7Ah batteries
- Maximum battery size 12Ah
- Optional DACT (SIA or Contact ID allowing user definable reporting codes)

Product Overview

- The Elite CP range of conventional fire control panels with optional built in communicator are available with 2, 4 or 8 initiating circuits which may be extensively configured via a simple front panel operated programming method
- The low standby power requirements and cost effective small batteries allow the panel to be mounted in a small discrete enclosure which is available in standard red or optionally in an attractive gray color.
- A simple programming method using just 3 front panel buttons allows an extensive list of configuration options to be set and reviewed.
- Single board construction which allows easy removal of all electronic parts and ample provision of cable entry knockouts simplify installation.
- 4 Amp notification appliance power and built in selectable sync protocols provide ample power and control for a wide range of standard notification appliances.
- The optional DACT allows dual line reporting to central stations and provides a 500 event history buffer.



Ordering Codes

Part number	Description
VF1842-10/11	2 Zone Panel - Red 115V/ 230V
VF1842-40/41	2 Zone Panel - Gray 115V/ 230V
VF1844-10/11	4 Zone Panel - Red 115V/ 230V
VF1844-40/41	4 Zone Panel - Gray 115V/ 230V
VF1848-10/11	8 Zone Panel - Red 115V/ 230V
VF1848-40/41	8 Zone Panel - Gray 115V/ 230V
VF1852-10/11	2 Zone Panel with Dialer - Red 115V/ 230V
VF1852-40/41	2 Zone Panel with Dialer - Gray 115V/ 230V
VF1854-10/11	4 Zone Panel with Dialer - Red 115V/ 230V
VF1854-40/41	4 Zone Panel with Dialer - Gray 115V/ 230V
VF1858-10/11	8 Zone Panel with Dialer - Red 115V/ 230V
VF1858-40/41	8 Zone Panel with Dialer - Gray 115V/ 230V
VF1850-00	8 reporting zone DACT
VF1841-00	DACT Configuration Software

Technical Specifications

Size: 14.5"W x 12.2"H x 4.25"D
Construction: 18AWG mild steel
Finish: Epoxy powder coated
Color : Red (optional gray)
Supply Voltage: 115V AC or 230V AC
Mains Supply fuse: 5 Amp 250V 20mm
Power supply DC rating: 24V 5 Amps
Maximum battery size: 12Ah 12V (2 per panel)
Trouble contact rating: 30V DC 1 Amp
Supervisory contact rating: 30V DC 1 Amp
Fire contact rating: 30V DC 1 Amp
NAC rating: 2.5A per circuit 4A Total
Detection zone current: 1.6 milliamps
Detection zone EOL resistor: 6k8 5%
NAC EOL resistor: 10k 5%
Cable capacity: 14 AWG
Operating temperature: 23°F to 122°F
Operating humidity: <95% (non condensing)

Elite CP

Conventional Annunciator Panels



Standard Features

- UL 864 Approved
- Red or Gray
- Available for 2, 4 or 8 zone models
- Fire, Trouble and Supervisory annunciation
- Internal Buzzer
- Internal Trouble diagnosis indicators
- Easy access to terminals
- Four wire connection (data and power)
- Supervised data connection
- Up to 7 annunciators per systems
- Compatible with flush mount collar (VF1821-X0)

Product Overview

- The Elite-CP Annunciator provides remote status indications of the Elite-CP Fire Control Panel for fire, trouble and supervisory conditions. Status indications of the annunciator are reported for 2, 4 or 8 zones. Zone LED indicators and Status LED indicators are synchronized to light at identical rates. The Elite-CP Annunciator includes an internal sounder and an automatic control for adjusting the lamp intensity of the Power and Trouble LEDs on the fascia of the unit.
- The annunciator provides connections for 24 VDC power and RS 485 communication. The RS 485 Bus supports maximum of 7 Elite-CP Annunciators. The Elite-CP Annunciator includes a dip switch for addressing and an End Of Line Resistor (EOLR). LEDs are included inside the annunciator for monitoring heart beat, error, transmit and receive conditions. The fascia and back- box of the Elite-CP Annunciator is provided in colors of gray or red.
- The user can write specific zone description on the labels to the right of the zone LED's

Ordering Codes

Part number	Description
VF1885-12	2 Zone Panel - Red
VF1885-42	2 Zone Panel - Gray
VF1885-14	4 Zone Panel - Red
VF1885-44	4 Zone Panel - Gray
VF1885-18	8 Zone Panel - Red
VF1885-48	8 Zone Panel - Gray

Technical Specifications

Size: 7 1/3"W x 5 1/5"H x 2 1/5"D

Construction: 18AWG mild steel

Finish: Epoxy powder coated

Color : Red (optional gray)

Weight: 2 lbs

Input Voltage: 24 VDC

Alarm Current: 40mA max @ 24VDC

Standby Current: 14mA max @ 24VDC

Maximum no. of units: Maximum of 7 Annunciators on the Aux 24V output and the RS485 Serial Bus

Connector Terminals: 14-24 AWG

RS485 Serial Bus: RS485 two-wire

Maximum distance from control panel:
3900 feet (1200 meters)

Belden 9271 cable

Operating temperature: 32°F to 120°F

Operating humidity: <93% (non condensing)

VF2030-00

Photoelectric Smoke Detector



Standard Features

- Low Profile - Only 1.8" high
- 2 wire base compatibility, relay bases available
- Highly stable operation, RF/Transient protection
- Low standby current
- Two built-in power/sensitivity supervision/alarm LEDs
- Non-directional smoke chamber
- Vandal resistant security locking feature
- Removable smoke labyrinth for cleaning or replacement
- Automatic Sensitivity window verification function meets outline requirements in the NFPA 72 Inspection Testing and Maintenance, Chapter 7

Note:

Bases are not included with detectors, please order separately.

Application

- The VF2030 can be used in all areas where photoelectric smoke detectors are required. It is suited for fires ranging from smoldering to flaming fires. VF2050 & VF2051 Style bases may be used with the VF2030.

Operation

The VF2030 Photoelectric Smoke Detector utilizes two bi-colored LEDs for indication of status. In a normal standby condition the LEDs flash green every 3 seconds.

When the detector senses that its sensitivity has drifted outside the UL listed sensitivity window the LEDs will flash Red every 3 seconds. When the detector senses smoke and goes into alarm the status LEDs will latch on Red.

The detector utilizes an infrared LED light source and silicon photo diode receiving element in the smoke chamber. In a normal standby condition, the receiving element receives no light from the pulsing LED light source. In the event of a fire, smoke enters the detector smoke chamber and light is reflected from the smoke particles to the receiving element. The light received is converted into an electronic signal.

Signals are processed and compared to a reference level, and when two consecutive signals exceeding the reference level are received within a specified period of time, the time delay circuit triggers the SCR switch to activate the alarm signal. The status LEDs light continuously during the alarm period.



Engineering Specification

The contractor shall furnish and install where indicated on the plans, VF2030 Photoelectric smoke detectors. The combination detector head and twist-lock base shall be UL listed compatible with a UL listed fire alarm panel.

When the supply power is 24VDC, the base shall permit direct interchange with VF2041 combination photoelectric/heat detector, VF2032 photoelectric smoke detector and VF2020 & VF2021 heat detector.

The base shall be appropriate twist-lock base VF2050 and VF2051.

The smoke detector shall have two flashing status LEDs for visual supervision. When the detector is in standby condition the LEDs will flash Green. When the detector is outside the UL listed sensitivity window the LEDs will flash Red. When the detector is actuated, the flashing LEDs will latch on Red. The detector may be reset by actuating the control panel reset switch.

The sensitivity of the detector shall be capable of being measured. It shall be possible to perform a functional test of the detector without the need of generating smoke. The sensitivity of the detector shall be monitored automatically and continuously to verify that it is operating within the listed sensitivity range.

To facilitate installation, the detector shall be non-polarized. Voltage and RF transient suppression techniques shall be employed to minimize false alarm potential. Auxiliary SPDT relays shall be installed where indicated on the drawing. The locking feature shall be field removable when not required.

Technical Specifications

Operating Voltage: Nominal 12V DC or 24V DC
Working Voltage: 8 - 35V DC
Light Source: GaAIAs infrared LED
Wave Form: Filtered DC 15% Ripple Max
Heat Sensor: 135° F
Supervisory Current: 38µA AVG @ 12V DC 55µA AVG @ 24V DC 70µA AVG @ 35V DC
Surge Current: 200µA AVG @ 24V DC
Alarm Current: 150mA Max
Ambient Temperature: 32° F to 120° F
Compatibility Identifier: HD-3
Color & Case Material: Bone/ White PC/ ABS Blend
Sensitivity Test Feature: Automatic Sensitivity window verification test
Dimensions: 1.8"H x 3.94"W

Ordering Codes

Part number	Description
VF2030-00	Photoelectric Smoke Detector
VF2050-00	4" Mounting Base
VF2051-00	6" Mounting Base

VF2031-00

Direct Wire Photoelectric Smoke Detector



Standard Features

- Low Profile - Only 2.0" High
- 2 Wire Models
- Highly Stable Operation, RF/Transient Protection
- Two built-in power/sensitivity supervision/alarm LED's
- Non-Directional Smoke Chamber
- Vandal Resistant Security Locking Feature
- Removable smoke labyrinth for cleaning or replacement
- Automatic Sensitivity window verification function meets outlined requirements in NFPA 72, Inspection, Testing and Maintenance

Application

- The VF2031 Series can be used in all areas where Photoelectric Smoke Detectors are required. It is suited for smoldering or flaming fires.

Operation

The VF2031 Series photoelectric smoke detector utilizes two bi-colored LED's for indication of status. In a normal standby condition the LED's flash Green every 3 seconds. When the detector senses that its sensitivity has drifted outside the UL listed sensitivity window the LED's will flash Red every 3 seconds. When the detector senses smoke and goes into alarm the status LED's will latch on Red.

The unit is comprised of an LED light source and silicon photo diode receiving element. In a normal standby condition, the receiving element receives no light from the pulsing light source. In the event of fire, smoke enters the detector and light is reflected from the smoke particles to the receiving element. The light received is converted to an electronic signal. Signals are processed in the comparator, and when two consecutive signals exceeding the basic level are received within a specific period of time, the time delay circuit triggers the SCR switch to activate the alarm signal. The status LED lights continuously during alarm period.

Engineering Specification

The contractor shall furnish and install where indicated on the plans VF2031 direct-wire photoelectric smoke detectors. The detector shall be UL listed compatible (2-wire model) with a UL listed fire alarm panel.

The smoke detector shall have green flashing status LED's for visual supervision. When the detector is actuated, the flashing LED's will turn red and latch on steady. The detector may be reset by actuating the control panel reset switch.

The detector shall have a sensitivity window verification feature. If the sensitivity of the detector drifts outside its approved window the LED's will flash red to indicate an out of sensitivity condition.

The vandal resistant, security locking feature shall be used in those areas as indicated on the drawing. The locking feature shall be field selectable.

It shall be possible to perform a functional test of the detector without the need of generating smoke. The method shall simulate effects of products of combustion in the chamber to ensure testing of detector circuits.

Voltage and RF transient suppression techniques shall be employed to minimize false alarm potential.

Technical Specifications

Operating Voltage: Nominal 12V DC or 24V DC

Working Voltage: 8 - 35V DC (35V DC Max)

Light Source: GaAIAs infrared LED

Wave Form: Filtered DC 15% Ripple Max

Average Standby Current: 38 μ A AVG @ 12V DC
55 μ A AVG @ 24V DC
70 μ A AVG @ 35V DC

Surge Current: 200 μ A Max

Alarm Current: 150mA Max

Ambient Temperature: 32° F to 120° F

Compatibility Identifier: HD-6

Color & Case Material: Bone/ White PC/ ABS Blend

Sensitivity Test Feature: Automatic Sensitivity window verification test

Ordering Codes

Part number	Description
VF2031-00	Direct wire Photoelectric Smoke Detector

VF2032-00

Photoelectric Smoke Detector



Standard Features

- Low Profile - 1.8" high (with base)
- 2 wire base compatibility, relay bases available
- Highly stable operation, RF/Transient protection
- Low standby current, 45 μ A at 24VDC
- Two built-in power/ alarm LEDs
- Non-directional smoke chamber
- Vandal resistant security locking feature
- Removable smoke labyrinth for cleaning or replacement

Note:

Bases are not included with detectors, please order separately.

Application

- The VF2032 can be used in all areas where Photoelectric Smoke Detectors are required. The wide range smoke chamber makes the VF2032 well suited for fires ranging from smoldering to flaming fires.
- VF2050 and VF2051 bases may be used with the VF2032. Current interchangeable/compatible devices are the VF2041 photoelectric detector with heat sensor, and the VF2020 & VF2021 heat detectors.

Operation

The VF2032 photoelectric smoke detector utilizes two bi-colored LEDs for indication of status. In a normal standby condition the LEDs flash Green every 3 seconds. When the detector senses smoke and goes into alarm the status LEDs will latch on Red.

The detector utilizes an infrared LED light source and silicon photo diode receiving element in the smoke chamber. In a normal standby condition, the receiving element receives no light from the pulsing LED light source. In the event of a fire, smoke enters the detector smoke chamber and light is reflected from the smoke particles to the receiving element. The light received is converted into an electronic signal.

Signals are processed and compared to a reference level, and when two consecutive signals exceeding the reference level are received within a specified period of time, the time delay circuit triggers the SCR switch to activate the alarm signal. The status LEDs light continuously during the alarm period.



Engineering Specification

The contractor shall furnish and install where indicated on the plans, VF2032 photoelectric smoke detectors. The combination detector head and twist-lock base shall be UL listed compatible with a UL listed fire alarm panel.

The base shall permit direct interchange with VES VF2041 combination photoelectric/heat detector, and/or VF2020 & VF2021 fixed temperature/rate-of-rise heat detectors.

The base shall be appropriate twist-lock base VF2050 and VF2051.

The smoke detector shall have two flashing status LEDs for visual supervision. When the detector is in standby condition the LEDs will flash Green. When the detector is outside the UL listed sensitivity window the LEDs will flash Red. When the detector is actuated, the flashing LEDs will latch on Red. The detector may be reset by actuating the control panel reset switch.

The sensitivity of the detector shall be capable of being measured. It shall be possible to perform a functional test of the detector without the need of generating smoke. The sensitivity of the detector shall be monitored automatically and continuously to verify that it is operating within the listed sensitivity range.

To facilitate installation, the detector shall be non-polarized. Voltage and RF transient suppression techniques shall be employed to minimize false alarm potential. Auxiliary SPDT relays shall be installed where indicated.

Technical Specifications

Rated Voltage: 17.7V DC to 30V DC

Working Voltage: 15 - 33V DC

Maximum Voltage: 42V DC

Light Source: GaAIAs infrared Emitting Diode

Supervisory Current: 45µA @ 24V DC

Surge Current: 160µA max. @ 24V DC

Alarm Current: 150mA max. @ 24V DC

Air Velocity Range: 0-300 fpm

Ambient Temperature: 32° F to 120° F

Color & Case Material: Bone PC/ ABS Blend

Sensitivity Test Feature: Automatic Sensitivity window verification test

Ordering Codes

Part number	Description
VF2032-00	Photoelectric Smoke Detector
VF2050-00	4" Mounting Base
VF2051-00	6" Mounting Base

VF2040-00

Direct Wire Photoelectric/ Heat Smoke Detector



Standard Features

- Low Profile - Only 2.375" High
- 2 Wire Models
- 135° F Latching Heat Sensor
- Highly Stable Operation, RF/Transient Protection
- Two built-in power/sensitivity supervision/alarm LED's
- Non-Directional Smoke Chamber
- Vandal Resistant Security Locking Feature
- Removable smoke labyrinth for cleaning or replacement
- Automatic Sensitivity window verification function meets outlined requirements in NFPA 72, Inspection, Testing and Maintenance

Operation

The VF2040 Series photoelectric smoke detector utilizes two bi-colored LEDs for indication of status. In a normal standby condition the LEDs flash Green every 3 seconds. When the detector senses that its sensitivity has drifted outside the UL listed sensitivity window the LEDs will flash Red every 3 seconds. When the detector senses smoke and goes into alarm the status LEDs will latch on Red.

The unit is comprised of an LED light source and silicon photo diode receiving element. In a normal standby condition, the receiving element receives no light from pulsing light source. In the event of fire, smoke enters the detector and light is reflected from the smoke particles to the receiving element. The light received is converted to an electronic signal. Signals are processed in the comparator, and when two consecutive signals exceeding the basic level are received within a specific period of time, the time delay circuit triggers the SCR switch to activate the alarm signal. The Status LED lights continuously during alarm period.



Engineering Specification

The contractor shall furnish and install where indicated on the plans VF2040 baseless photoelectric smoke detectors. The combination detector head shall be UL listed compatible with an UL listed fire alarm panel.

The smoke detector shall have flashing status LED for visual supervision. When the detector is actuated, the flashing LED will latch on steady at full brilliance. The detector may be reset by actuating the control panel reset switch.

The detector shall have a sensitivity window verification feature.

The vandal resistant, security locking feature shall be used in those areas as indicated on the drawing. The locking feature shall be field selectable.

It shall be possible to perform a functional test of the detector without the need of generating smoke. The method shall simulate effects of products of combustion in the chamber to ensure testing of detector circuits.

Voltage and RF transient suppression techniques shall be employed to minimize false alarm potential.

Technical Specifications

Operating Voltage: Nominal 12V DC or 24V DC

Working Voltage: 8 - 35V DC (35V DC Max)

Light Source: GaAIAs infrared LED

Wave Form: Filtered DC 15% Ripple Max

Average Standby Current: 38 μ A AVG @ 12V DC
55 μ A AVG @ 24V DC
70 μ A AVG @ 35V DC

Surge Current: 200 μ A Max

Alarm Current: 150mA Max

Ambient Temperature: 32° F to 120° F

Heat Sensor: 135° F

Compatibility Identifier: HD-6

Color & Case Material: Bone/ White PC/ ABS Blend

Sensitivity Test Feature: Automatic Sensitivity window verification test

Ordering Codes

Part number	Description
VF2040-00	Direct Wire Photoelectric/ Heat Smoke Detector

VF2041-00

Photoelectric/ Heat Smoke Detector



Standard Features

- Low Profile - 1.8" high (with base)
- 2 wire base compatibility, relay bases available
- 135°F Fixed Temperature heat sensor (Latching)
- Heat sensor protected by a built-in guard
- Highly stable operation, RF/Transient protection
- Low standby current, 45µA at 24VDC
- Two built-in power/sensitivity supervision/alarm LED's
- Non-directional smoke chamber
- Vandal resistant security locking feature
- Removable smoke labyrinth for cleaning or replacement
- Automatic Sensitivity window verification function meets outlined requirements in NFPA 72, Chapter 2 & 7, Inspection, Testing and Maintenance

Note:

Bases are not included with detectors, please order separately.

Application

- The VF2041 can be used in all areas where Photoelectric Smoke Detectors are required. The wide range smoke chamber makes the VF2041 well suited for fires ranging from smoldering to flaming fires.
- VF2050 & VF2051 Style bases may be used with the VF2041. Current interchangeable/compatible devices are the VF2032 photoelectric detector and the VF2020 & VF2021 heat detectors.

Operation

The VF2041 photoelectric smoke detector utilizes two bi-colored LED's for indication of status. In a normal standby condition the LED's flash Green every 3 seconds. When the detector senses that its sensitivity has drifted outside the UL listed sensitivity window the LED's will flash Red every 3 seconds. When the detector senses smoke and goes into alarm the status LED's will latch on Red.

The detector utilizes an infrared LED light source and silicon photo diode receiving element in the smoke chamber. In a normal standby condition, the receiving element receives no light from the pulsing LED light source. In the event of a fire, smoke enters the detector smoke chamber and light is reflected from the smoke particles to the receiving element. The light received is converted into an electronic signal.

Signals are processed and compared to a reference level, and when two consecutive signals exceeding the reference level are received within a specified period of time, the time delay circuit triggers the SCR switch to activate the alarm signal. The status LED's light continuously during the alarm period.



Engineering Specification

The contractor shall furnish and install where indicated on the plans, VF2041 photoelectric smoke detectors. The combination detector head and twist-lock base shall be UL listed compatible with a UL listed fire alarm panel.

The base shall permit direct interchange with VF2032 photoelectric detector and/or VF2020 & VF2021 fixed temperature/rate-of-rise heat detectors. The base shall be appropriate twist-lock base VF2050 and VF2051.

The smoke detector shall have two flashing status LED's for visual supervision. When the detector is in standby condition the LED's will flash Green. When the detector is outside the UL listed sensitivity window the LED's will flash Red. When the detector is actuated, the flashing LED's will latch on Red. The detector may be reset by actuating the control panel reset switch.

The sensitivity of the detector shall be capable of being measured. It shall be possible to perform a functional test of the detector without the need of generating smoke. The sensitivity of the detector shall be monitored automatically and continuously to verify that it is operating within the listed sensitivity range.

To facilitate installation, the detector shall be non-polarized. Voltage and RF transient suppression techniques shall be employed to minimize false alarm potential. Auxiliary SPDT relays shall be installed where indicated.

The vandal-resistant, security locking feature shall be used in those areas as indicated on the drawing. The locking feature shall be field removable when not required.

Technical Specifications

Rated Voltage: 17.7V DC to 30V DC

Working Voltage: 15 - 33V DC

Maximum Voltage: 42V DC

Light Source: GaAIAs infrared Emitting Diode

Supervisory Current: 45µA @ 24V DC

Surge Current: 160µA max. @ 24V DC

Alarm Current: 150mA max. @ 24V DC

Heat Sensor: 135° F

Ambient Temperature: 32° F to 120° F

Color & Case Material: Bone PC/ ABS Blend

Sensitivity Test Feature: Automatic Sensitivity window verification test

Ordering Codes

Part number	Description
VF2041-00	Photoelectric/ Heat Smoke Detector
VF2050-00	4" Mounting Base
VF2051-00	6" Mounting Base

VF2020-00 & VF2021-00

Fixed Temperature Heat Detector



Standard Features

- Choice of fixed temperature/rate-of-rise 135°F or 190°F heat detector
- UL Listed spacing up to 60' by 60'
- 2 or 4 wire base compatibility, relay bases available
- Highly stable operation, RF/Transient protection
- Low standby current, 35µA nominal
- Two built-in power/alarm LED's for 360° viewing
- Fully electronic operation
- Power/alarm LED's confirm detector status
- Compatible with VES detectors and their bases

Note:

Bases are not included with detectors, please order separately.

Technical Specifications

Response: VF2020 - 135° ± 7.5°F

VF2021 - 190° ± 7.5°F

Supply Voltage: 17.7 - 30.0 VDC (4 Wire)

Supervisory Current: 40µA @ 24 VDC

Surge Current: 160µA max. @ 24 VDC

Alarm Current: 150mA max. @ 24 VDC

Ambient Temperature: 32°F to 120°F

Contact Rating N/O Contacts: 150mA max. @ 24 V

Color & Case Material: Bone PC/ABS blend

Application

The VF2020 & VF2021 fixed temperature/rate-of-rise heat detector are suited for installation where high heat output fires are expected or in areas where ambient conditions would not allow use of other detection methods. Heat detectors are intended for protection of property. Do not rely on heat detectors for life safety protection. Where life safety is a concern, smoke detectors must also be used. A UL listed fire alarm panel must electronically supervise the VF2020 & VF2021 heat detectors.

All conventional devices are mechanically compatible with VES bases. Please check individual panel listings for appropriate listed bases

Operation

- The VF2020 & VF2021 fixed temperature/rate-of-rise heat detectors are suited to detect in the presence of slow or fast rising temperatures due to burning combustibles.
- The construction of these models incorporate a thermistor heat element protected from damage by the built-in, durable plastic guard. These electronic heat detectors incorporate two power/alarm LED's for 360° indication of status. In standby condition the power LED's flash Green. In an alarm condition the LED's latch on Red. The VF2020 & VF2021 electronic heat detection circuitry performs the same function as a Mechanical Device but with Electronic Precision. If the heat rise is less than 12°/minute the detector will not alarm until it reaches its alarm temperature (135° or 190° ± 7.5°F). If the heat rise is greater than 12°/minute the detector will alarm immediately giving an early warning signal and latching the Red alarm LED's on.



VF2050-00

4" Conventional Base

VF2051-00

6" Conventional Base

Standard Features

- Designed for use with all VES conventional sensors
- Available in 4 and 6 inch models
- Contains a security locking tab for tamper protection

Operation

The VF2050 & VF2051 Series is designed specifically for use with VES Conventional Models VF2032 Photoelectric Smoke Detector, VF2041 Photoelectric with Heat Smoke Detector, VF2030 Photoelectric Smoke Detector, VF2040 Photoelectric Smoke Detector w/heat, or VF2020 & VF2021 Fixed Temperature/Rate-of-Rise Heat Detector.

The Base is an electronics free 6" base featuring a plastic tamper-lock lug. Each base is equipped with a resistor. Refer to the chart (below) for additional specifications. The VF2050 base is a 4" version of the VF2051 6" base.



VF2050-00



VF2051-00

Technical Specifications

Alarm Current: 93mA (136mA @ 33V max.)

SLC Loop Idle Current: 110 μ A

Compatibility Identifier: HB-3



VoiceAlert Voice Evacuation System



VoiceAlert
Master and Distributed Voice
Evacuation System

Pages 78-79



VoiceAlert
50W and 100W Voice
Evacuation System

Page 80



VoiceAlert
150W and 200W Voice Evacuation System

Page 81



VoiceAlert
Voice Evacuation System Schematic

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VoiceAlert

Voice Evacuation System

VF97XX-X0 Master Panel

VF97XX-X0 Distributed Panel



VF9700 Master Panel

Standard Features

- True Multiplex 6 Channel Distributed Audio
- Integrated Fire Phone, Area of Rescue and Fan & Damper Control capability
- Modular System - components added as needed
- Integrated 2 Channel Digital Message Repeater
- Live Microphone Page to any zone
- Fast RS-485 Communication Protocol
- Easy Installation and Operation
- Natural Sound Voice Recordings
- Built in Alarm and Alert Signals
- Up to 4 Minute Message Capacity
- Works with 12VDC or 24VDC Fire Alarm Panel
- Listed with for use with the Elite FACP
- 3 Minute Message Restart on Microphone Key
- Fully Supervised

Operation

- Basic System includes

Master Panel (VF97XX)

- Master Mic Control
- 16 switch control points
- Dual Channel DMR
- High speed communication loop

Distributed Panel (VF97XX*)

- 4 Output Zones (may be configured for 8)
- Dual Channel Audio Interface
- Dual Channel Amplification

Optional

- Integrated Fire Phone
- Area-of-Rescue
- Fan and Damper system control

Maximum System Configuration

- Up to 256 Distributed Panels (VF97XX)
- Up to 2028 monitor and control points

*Number of distributed panels to be determined by building specifications

Product Overview

- The VES VoiceAlert High Rise Evacuation System operates in conjunction with the Elite Fire Alarm Control Panel (FACP) in a building to provide automatic response to life safety emergencies. The VoiceAlert system includes all necessary features to provide an effective voice evacuation system. The VoiceAlert can be custom configured to satisfy the needs of any high rise application.
- Fire department authorities can easily take command of evacuation or relocation procedures and emergencies. Building management and fire brigades can monitor and control emergency response even before the professionals arrive. The VoiceAlert system includes capacity for 6 Channels of simultaneous audio. This provides for evacuation, stay-in-place, or other public address announcements and automatic messages.
- Fire Fighter Phones or Warden Stations may be included as required. Area-of-Rescue stations can reassure handicapped occupants that help is on the way. Smoke control, stair pressurization, and HVAC shutdown can be completely automatic, unless controlled manually by management or fire authorities.

Military Emergency VoiceAlert Systems - DOD Compliant

- The U.S. Department of Defense is requiring mass notification systems in inhabited buildings.
- The ability to quickly broadcast pre-recorded and live warnings to all personnel is considered essential in reducing casualties in the event of attack on DOD facilities.
- The VoiceAlert VMX supervised emergency voice alert system meets or exceeds DOD Minimum Anti-terrorism Standards for Buildings, UFC 4-010-01. It is also compliant with UFC 4-021-01, Design and O & M Mass Notification Systems.





VF97XX Distributed Panel

Fire Phone accessories give the VMX system two-way communication capability. Fire Phone jacks are mounted on a single gang plate. Fixed telephone and warden stations are available in surface/ semi-flush mount cabinet with a thumb-turn-latch.



VF9512 Telephone Jack

- Brushed Stainless Steel
- Single Gang Plate



VF9511 Portable Handset

- Color - Red
- 6 mount in VF9510 cabinet
- Can be used with telephone jack plate (VF9512)

Voice Alert Panel Options

VF9520-00	Mother Board
VF9521-00	Fire Phone Input Card
VF9522-00	Fire Phone Output Card
VF9535-00	Extended Input Interface
VF9558-00	Class A Return Module
VF9720-10	Master Panel, 16 Zone, Red
VF9722-10	Master Panel, 32 Zone, Red
VF9724-10	Master Panel, 48 Zone, Red
VF9726-10	Master Panel, 64 Zone, Red
VF9728-10	Master Panel, 80 Zone, Red
VF9730-10	Master Panel, 96 Zone, Red
VF9740-10	Master Panel, 16 Zone, w/Phone, Red
VF9742-10	Master Panel, 32 Zone, w/Phone, Red
VF9744-10	Master Panel, 48 Zone, w/Phone, Red
VF9746-10	Master Panel, 64 Zone, w/Phone, Red
VF9748-10	Master Panel, 80 Zone, w/Phone, Red
VF9750-10	Master Panel, 96 Zone, w/Phone, Red
VF9760-10	Distributed Panel, Single, 25W, Red
VF9762-10	Distributed Panel, Single, 50W, Red
VF9764-10	Distributed Panel, Single, 100W, Red
VF9768-10	Distributed Panel, Single, 50W, w/Phone, Red
VF9770-10	Distributed Panel, Single, 100W, w/Phone, Red
VF9774-10	Distributed Panel, Dual, 50W, Red
VF9776-10	Distributed Panel, Dual, 100W, Red
VF9778-10	Distributed Panel, Single, 25W, w/Phone, Red
VF9780-10	Distributed Panel, Dual, 50W, w/Phone, Red
VF9782-10	Distributed Panel, Dual, 100W, w/Phone, Red
VF9793-10	Distributed Panel, Dual, 200W, w/Phone, Red
VF4020-10	Speaker, Wall or Ceiling 4 Watt Red
VF4022-10	Speaker / Strobe, Wall or Ceiling 4 Watt Red
VF9512-00	Telephone Jack
VF9511-10	Portable Handset, Red
VF9514-10	Fire Phone Station, Red
VF9524-10	Warden Station, Red
VF9510-10	Telephone Cabinet, Red



VF9510 Telephone Cabinet

- Holds 6 VF9511
- Available in Red or Gray
- Size: Surface / Semi-Flush Mount / Key Lock 27 x 14-1/2 x 4" h-w-d



VF9514 Fire Phone Station

- Coil cord / Thumb Turn Latch
- Available in Red or Gray
- Size: Surface / Semi-Flush Mount 12-3/4 x 7-1/4 x 3-3/4" h-w-d

VF9524 Warden Station

- Armored cable / Thumb Turn Latch
- Available in Red or Gray
- Size: Surface / Semi-Flush Mount 12-3/4 x 7-1/4 x 3-3/4" h-w-d

VoiceAlert

Voice Evacuation System

VF922x* / VF924x*



The VF922x and VF924x range in the Voice Evacuation System provides 50Watts and 100Watts of speaker power respectively.

The VF922x and VF924x range includes all necessary features to provide an effective voice evacuation system. With the addition of zone splitters, remote microphone panels and expander modules, both ranges can be custom configured to satisfy the needs of most applications.

- Clean Dead-front Construction
- Digitally Recorded Automatic Evacuation Message (Up to 4 Minutes of Message Capacity)
- 50/ 100 Watt High Efficiency Digital Amplifier (VF922x/ VF924x)
- 25 or 70 VRMS Field Selectable
- 120 VAC Power Supply and Battery Charger
- Live Microphone Override of Message and Tone
- Analog Addressable Compatible
- High Reliability, No Maintenance
- Fully Supervised
- Easy Installation and Operation
- Natural Sound Recordings
- Built in Alarm and Alert Signals
- Works with 12VDC or 24VDC Fire Alarm Panels
- Works with Analog/Addressable and Microprocessor based Fire Alarm Panels
- 3 Minute Message Restart on Microphone Key
- 24 Hour Backup with two 12V 7Ahr Batteries

Ordering Codes		Ordering Codes	
Part number	Description	Part number	Description
VF9220	50W Voice Evacuation System with Power Supply / Battery Charger Paging Microphone	VF9240	100W Voice Evacuation System with Power Supply / Battery Charger Paging Microphone
VF9221	50W Voice Evacuation System with 4 Speaker Zones	VF9241	100W Voice Evacuation System with 4 Speaker Zones
VF9222	50W Voice Evacuation System with 8 Speaker Zones	VF9242	100W Voice Evacuation System with 8 Speaker Zones
VF9223	50W Voice Evacuation System with 12 Speaker Zones	VF9243	100W Voice Evacuation System with 12 Speaker Zones
VF9224	50W Voice Evacuation System with 16 Speaker Zones	VF9244	100W Voice Evacuation System with 16 Speaker Zones

Color - VFXXXX-10 for Red, VFXXXX-20 for Charcoal

Color - VFXXXX-10 for Red, VFXXXX-20 for Charcoal



VoiceAlert

Voice Evacuation System

VF926x*/ VF928x*

The VF926x and VF928x range of panels provide 150Watts and 200Watts of speaker power respectively. Speaker zones can be configured for general alarm or alarm by zone operation as required.

- Dead-front Construction
- Digitally Recorded Automatic Evacuation Message (Up to 4 Minutes of Message Capacity)
- 150/ 200 Watt Amplifier (VF926x/ VF928x)
- 25 or 70 VRMS Field Selectable
- 120 VAC Power Supply and Battery Charger
- Live Microphone Override of Message and Tone
- Analog Addressable Compatible
- High Reliability
- Fully Supervised
- Easy Installation and Operation
- Natural Sound Recordings
- Built in Alarm and Alert Signals
- Works with 12VDC or 24VDC Fire Alarm Panel
- Works with Analog/Addressable and Microprocessor based Fire Alarm Panels.



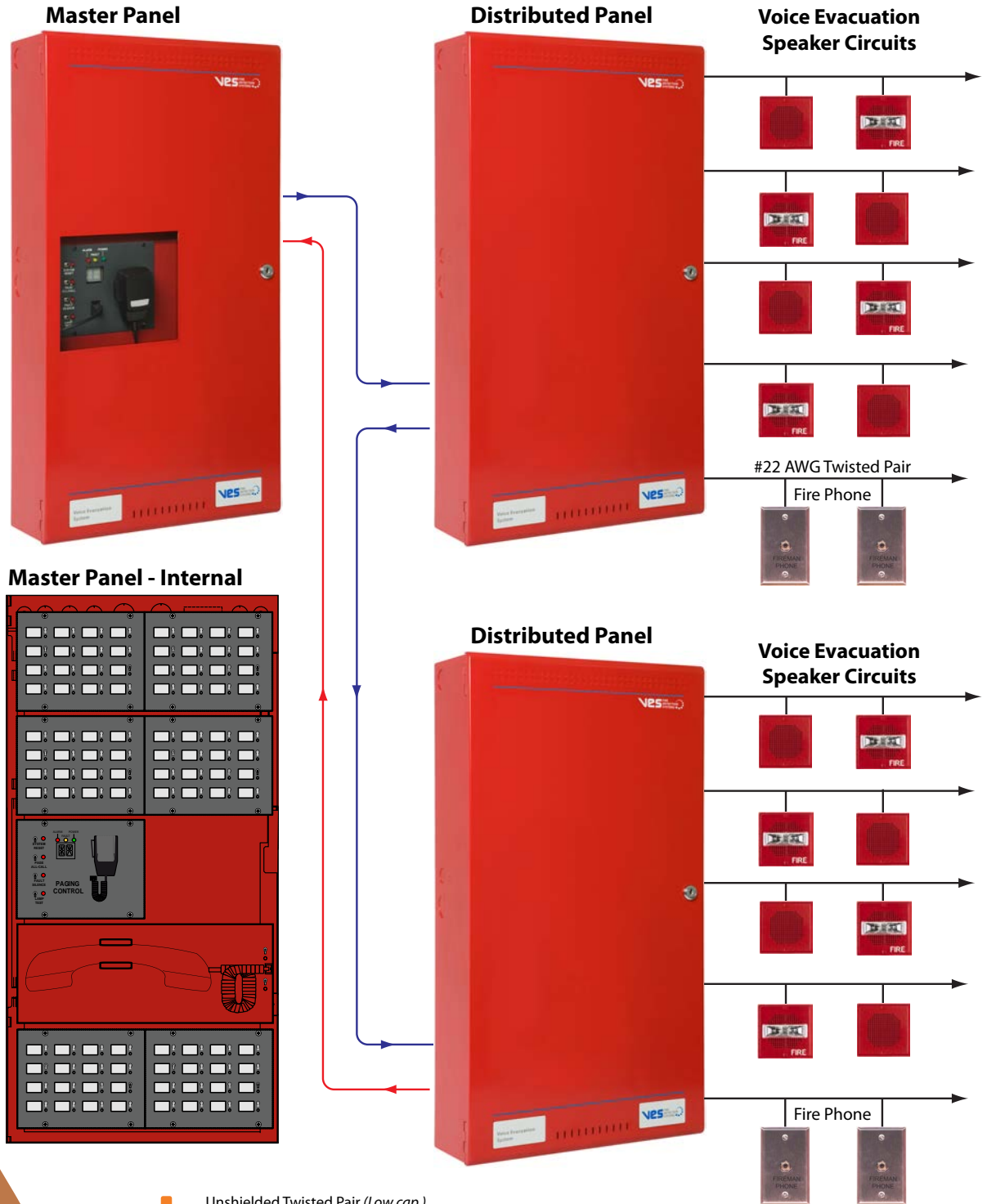
Ordering Codes		Ordering Codes	
Part number	Description	Part number	Description
VF9260	150W Voice Evacuation System with 2 Speaker Circuits 1 - 100W 1 - 50W, Power Supply / Battery Charger, Paging Microphone, Digital Message Repeater	VF9280	200W Voice Evacuation System with 2 Speaker Circuits 1 - 100W 1 - 50W, Power Supply / Battery Charger, Paging Microphone, Digital Message Repeater
VF9261	150W Voice Evacuation System with 8 Speaker Zones 100W/ 4Z 50W / 4Z	VF9281	200W Voice Evacuation System with 8 Speaker Zones 100W/ 4Z 50W/ 4Z
VF9262	150W Voice Evacuation System with 12 Speaker Zones 100W/ 8Z 50W / 4Z	VF9282	200W Voice Evacuation System with 12 Speaker Zones 100W/ 8Z 50W/ 4Z
VF9263	150W Voice Evacuation System with 16 Speaker Zones 100W/8Z 50W/8Z	VF9283	200W Voice Evacuation System with 16 Speaker Zones 100W/8Z 50W/8Z

Color - VFXXXX-10 for Red, VFXXXX-20 for Charcoal Color - VFXXXX-10 for Red, VFXXXX-20 for Charcoal



* for full product listings please see our price guide

VoiceAlert- Voice Evacuation System Schematic



- Unshielded Twisted Pair (*Low cap.*)
- 4,000 Feet max. between panels
- Data and 6 Audio Channels simultaneously
- High Speed RS-485 Communications
- Switch plates can be added or removed in banks of 16
- Giving up to 128 switches (or 96, if telephone is used)
- Telephone can be added or removed. This takes up two plate areas

Notification Appliances



Mini Horns

Pages 84-85



**Wall Mount Horn,
Horn/ Strobes**

Pages 86-87



**Ceiling Mount Horn,
Horn/ Strobes**

Pages 88-89



Weatherproof Devices

Pages 90-91



**Wall Mount Speaker/
Strobes**

Pages 92-93



**Ceiling Mount
Speaker/ Strobes**

Pages 94-95



**Synchronization
Modules**

Page 96

VF4027-X0 24V Low Current Mini-Horn Temporal Tone with Terminal Blocks



Standard Features

- UL 464 Listed
- Unit Dimensions: 4.48" High x 2.84" Wide x 0.5" Deep
- Jumper Selectable Temporal 3 or Continuous Tone on the VF4027
- Horn Frequency is 3100Hz
- Terminal Blocks (12 AWG to 18 AWG)
- Low Current Consumption
- Variety of Mounting Options for New Construction and Retrofit Applications
- To Synchronize the VF4027 use the VES VF4009 Series Control Module
- Textured Finish High Impact Plastic
- Faceplate available in Red or Off-White

Product Overview

- The VF4027 Series mini-horn is a high quality remote signaling appliance that offers dependable remote annunciation. The VF4027 is listed for use with both filtered and unfiltered power.
- With the VF4027 a jumper is provided to select either the continuous tone or the temporal 3 evacuation tone.
- The VF4027 can be used on the same sync circuit (VF4009 Series Control Module) as other VES signals. The VF4027 appliances are UL 464 listed for use with fire protective systems and are warranted for three years from the date of purchase.

Notes: Operating temperature - Indoor Use Only. Indoor: 32° to 120°F (0° to 49°C).

- The sound output for the temporal 3 tone is rated lower since the time the horn is off is averaged into the sound output rating. While the horn is producing a tone in the temporal 3 mode its sound pressure is the same as the continuous mode.

VF4027 Current Ratings

24 VDC	22mA
24 VDC UL Max ¹	18mA

Horn Mode	Minimum dBA @ 10ft. per UL464 @ 24V	Reverberant dBA @ 10ft per UL464	In Anechoic Room dBA @ 10ft.
Temporal	81	78-86	90
Continuous	86	78-86	90

¹RMS current ratings are per UL average RMS method. UL max current rating is the maximum RMS current within the listed voltage range 16-33VDC for 24VDC units. For strobes the UL max current is usually at the minimum listed voltage 16VDC for 24VDC units. For audibles the max current is usually at the maximum listed voltage.

Ordering Codes

Part number	Description
VF4027-10	24V Low Current Mini Horn, Temporal Tone - Red Faceplate
VF4027-30	24V Low Current Mini Horn, Temporal Tone - Off-White Faceplate

Architects and Engineers Specifications

The alarm horns shall be VES Model VF4027. The appliance shall be listed with Underwriters Laboratories for use with Fire Protective Signaling Systems and produce a peak sound output of 90dBA or greater as measured in an anechoic chamber. The appliance shall be of solid-state construction and be polarized to operate from 8-33VDC with a 22mA current drain at 24VDC. The appliance shall be provided with 2 terminals, and mount to a variety of single-gang back boxes.

Wall Mount VF4000-X0 Low Profile Evacuation Horn Horn, Horn/ VF4001-X0 Low Profile Evacuation Strobe Strobes VF4002-X0 Low Profile Evacuation Horn/ Strobe



Standard Features

- FM Approved, UL 464, UL 1971 Listed
- Nominal voltage 24VDC
- Units have field selectable candela options of 15, 30, 60, 75, and 110 candela
- Super-Slide™ Bracket - Ease of Supervision Testing
- Checkmate™ - Instant Voltage Verification
- Unit Dimensions: 5" high x 4.5" wide x 2.5" deep
- Synchronize strobe and/or horn with VES Series Control Module
- Prewire entire system, then install signals
- Lower installation and operating costs
- Input terminals 12 to 18 AWG
- Switch selection for high or low dBA
- Switch for chime, whoop, mechanical and 2400Hz tone
- Tamperproof re-entrant grill
- Switch for continuous or temporal 3 (not available on whoop tone)
- Surface mount with the VF4005 (VES Surface Mount Box)
- Silence horn while strobes remain flashing
- Wide voltage range 16-33VDC or FWR

Product Overview

- The VES Signal Series is a low profile strobe and horn/strobe combination that offers dependable audible and visual alarms and the lowest current available.
- The VES Series 24VDC offers tamperproof field selectable candela options of 15, 30, 60, 75, and 110 candela.
- The VES Series horn offers a continuous or synchable temporal three in 2400Hz and mechanical tone, a chime and whoop tone. All tones are easy for the professional to change in the field by using switches.
- The VES Series has a minimal operation current and has a minimum flash rate of 1Hz regardless of input voltage.
- The VES Series is shipped with the standard 4" metal mounting plate which incorporates the popular Super-Slide™ feature that allows the installer to easily test for supervision. The product also features a locking mechanism which secures the product to the bracket without any screws showing.
- The appliance also features the Checkmate™ - Instant Voltage Verification feature which allows the installer to check the voltage drop draw and match it to the blueprint.
- The VES Series appliances are UL 464 and UL 1971, listed for use with fire protective systems and are warranted for three years from date of purchase.



Ordering Codes

Part number	Description	Reverberant dBA @ 10ft. Per UL 464 ¹	In Anechoic Room dBA @ 10ft.
VF4000-10	24V Low Profile Evacuation Horn - Red Faceplate	62-82	100
VF4000-30	24V Low Profile Evacuation Horn - Off-White Faceplate	62-82	100
VF4001-10	24V Selectable Candela Low Profile Evacuation Strobe - Wall Mount, Red Faceplate	62-82	100
VF4001-30	24V Selectable Candela Low Profile Evacuation Strobe - Wall Mount, Off-White Faceplate	62-82	100
VF4002-10	24V Selectable Candela Low Profile Evacuation Horn/ Strobe - Wall Mount, Red Faceplate	62-82	100
VF4002-30	24V Selectable Candela Low Profile Evacuation Horn/ Strobe - Wall Mount, Off-White Faceplate	62-82	100

VF4000/ VF4001/ VF4002 Product Strobe Current Ratings

Candela	15cd	30cd	60cd	75cd	110cd
24 VDC	30mA	35mA	66mA	80mA	103mA
UL Max ¹	42mA	60mA	97mA	116mA	157mA

¹RMS current ratings are per UL average RMS method. UL max current rating is the maximum RMS current within the listed voltage range 16-33VDC for 24VDC units. For strobes the UL max current is usually at the minimum listed voltage 16VDC for 24VDC units. For audibles the max current is usually at the maximum listed voltage. For unfiltered FWR ratings, see installation manual.

Horn Mode	Minimum dBA @ 10ft. per UL464 (HIGH)	Minimum dBA @ 10ft. per UL464 (LOW)	Regulated 24VDC Max. Operating @ High Setting (mA)
Temp 3 2400Hz	78	71*	28
Temp 3 Mechanical	76	70*	25
Temp 3 Chime	70*	66*	15
Continuous 2400Hz	81	74*	28
Continuous Mechanical	80	72*	25
Continuous Chime	70*	66*	15
Whoop	82	69*	56

*Operating the horn in this mode at this voltage will result in not meeting the minimum UL reverberant sound level required for public mode fire protection service. These settings are acceptable only for private mode fire alarm use. Use the high dBA setting for public mode application (not applicable when using the chime tone. The chime tone is always private mode.

Notes:

To obtain the horn/strobe current draw, add the strobe current draw and the horn current draw.

Operating temperature: 32° to 120°F (0° to 49° C). The VES Series is not listed for outdoor use.

The sound output for the temporal 3 tone is rated lower since the time the horn is off is averaged into the sound output rating. While the horn is producing a tone in the temporal 3 mode its sound pressure is the same as the continuous mode.

For nominal and peak current across UL regulated voltage range for filtered DC power and unfiltered (FWR [Full Wave Rectified]) power, see installation manual.

VES does not recommend using a coded or pulsing signaling circuit with any of our strobe products.

Ceiling Mount Horn, Horn/ Strobes

VF4003-X0 24V Strobe

VF4004-X0 24V Horn/ Strobe



Standard Features

- FM Approved, UL 464, UL 1971 Listed
- Nominal Voltage 24 VDC
- Tamperproof Field Selectable Candela options of 15, 30, 75, 95, 115 & 150
- Super-Slide™ Bracket - Ease of Supervision Testing
- Checkmate™ - Instant Voltage Verification
- Unit Dimensions: 6" x 2.6"
- Synchronize VF4003 Series by using VES Series Control Module
- Prewire Entire System, then Install Your Signals
- Input Terminals 12 to 18 AWG
- Switch Selection for High or Low dBA
- Switch Selection for 2400Hz or Mechanical Tone
- Switch Selection for Continuous or Temporal 3
- Tamperproof Re-entrant Grill
- Surface Mount with the Ceiling Surface Mount Box
- Silence Horn While Strobes Remain Flashing
- Wide Voltage Range 16-33 VDC or FWR
- Faceplate available in Red or Off-White

Product Overview

- The VF4003/VF4004 Series is a ceiling mount strobe or horn/strobe combination that offers dependable audible and visual alarms and the lowest current available.
- The VF4003/VF4004 offers tamperproof field selectable candela options of 15, 30, 75, 95, 115 and 150 candela.
- The VF4004 horn offers a continuous or synchronizable temporal three in 2400Hz or mechanical tone. These tones are easy for the professional to change in the field by using switches. The models are shipped from the factory in the temporal three alarm mode.
- The VES Series has a minimal operating current and has a minimum flash rate of 1Hz regardless of input voltage.
- This Series comes standard with the 4" mounting plate which incorporates the popular Super-Slide™ feature that allows the installer to easily test for supervision.
- The VF4003/VF4004 Series also features the Checkmate™ - Instant Voltage Verification feature which allows the installer to check the voltage without removing the signal.
- The VES Series appliances are UL 464 and UL 1971 listed for use with fire protective systems and are warranted for three years from the date of purchase.

VF4003 Ordering Codes

Part number	Description
VF4003-10	24V Ceiling Mount Selectable Strobe - Red Faceplate
VF4003-30	24V Ceiling Mount Selectable Strobe - Off-White Faceplate

VF4004 Ordering Codes

Part number	Description	Reverberant dBA @ 10ft. Per UL 464 ¹	In Anechoic Room dBA @ 10ft.
VF4004-10	24V Ceiling Mount Selectable Horn/ Strobe - Red Faceplate	81-86	90
VF4004-30	24V Ceiling Mount Selectable Horn/ Strobe - Off-White Faceplate	81-86	90

Notes:

The VES Series is not listed for outdoor use.

Operating temperature: 32° to 120°F (0° to 49° C)

For nominal and peak current across UL regulated voltage range for filtered DC power and unfiltered (FWR [Full Wave Rectified]) power.

VES does not recommend using a coded or pulsing signaling circuit with any of our strobe products.

VF4003/ VF4004 Product Strobe Current Ratings

Candela	15cd	30cd	75cd	95cd	115cd	150cd
24 VDC	72mA	101mA	167mA	200mA	214mA	286mA
UL Max ²	120mA	130mA	247mA	318mA	360mA	454mA

Horn Mode	Minimum dBA @ 10ft. per UL464 (HIGH)	Minimum dBA @ 10ft. per UL464 (LOW)	Regulated 24VDC Max. Operating @ High Setting (mA)
Temp 3 2400Hz	83	75	23
Temp 3 Mechanical	81	73*	22
Continuous 2400Hz	86	78	23
Continuous Mechanical	84	76	22

*Operating the horn in this mode at this voltage will result in not meeting the minimum UL reverberant sound level required for public mode fire protection service. These settings are acceptable only for private mode fire alarm use. Use the high dBA setting for public mode application.

Notes: The sound output for the temporal 3 tone is rated lower since the time the horn is off is averaged into the sound output rating.

While the horn is producing a tone in the temporal 3 mode its sound pressure is the same as the continuous mode.

To obtain the horn/strobe current draw, add the strobe current draw and the horn current draw.

¹ The listed horn current draws are for the Continuous Tone mode. The Temporal 3 Tone has a reverberant dBA @ 10ft. per UL 464 is 77-83 with a horn current draw of 34mA.

² RMS current ratings are per UL average RMS method. UL max current rating is the maximum RMS current within the listed voltage range 16-33VDC for 24VDC units. For strobes the UL max current is usually at the minimum listed voltage 16VDC for 24VDC units. For audibles the max current is usually at the maximum listed voltage. For unfiltered FWR ratings, see installation manual.

Weather- proof Devices

VF4029-X0 24V Low Profile Evacuation Horn

VF4006-X0 24V Low Profile Evacuation Outdoor
Strobe

VF4007-X0 24V Low Profile Evacuation Outdoor
Horn/ Strobe



Standard Features

- UL 464, UL 1638 Listed
- Nominal Voltage 24VDC
- Unit is Shipped with UL1638 listed VF4006 Candela Strobe or VF4007 Candela Horn/ Strobe
- Unit Dimensions: VF4008 5.75" High x 4.75" Wide x 4.18" Deep
- To Obtain Outdoor Horn, Must Order VF4029 and VF4008 Separately
- Super-Slide™ - Ease of Supervision Testing
- Checkmate™ - Instant Voltage Verification
- Lower Installation and Operating Costs
- Switch Selection for High dBA
- Switch for Mechanical and 2400Hz Tone
- Switch for Continuous Tone
- Tamperproof Re-entrant Grill
- Wide Voltage Range 16-33 VDC or FWR
- Separate Horn and Strobe Functions
- Synchronize Strobe and/or Horn by Using VES Synchronization Control Module
- Listed for UL1638 when used with the VF4008 enclosure
- VF4008 Made of Clear Lexan - Provides Maximum Visibility and Reliability for effective Visible Signaling - Allowing Full 75cd Output
- Input Terminals 12 to 18 AWG
- Faceplate available in Red or Off-White

Product Overview

- The Outdoor VES Series offers dependable visible and/or audible alarms for all outdoor needs.
- Included with the VES Series is the VF4008 outdoor enclosure. The enclosure is made of high quality Lexan material, providing protection from weather related conditions and allowing the necessary full candela output. This highly constructed enclosure meets various installation requirements including deterring moisture from entering the enclosures.
- The Outdoor Series is equipped with the 4" mounting plate which incorporates the Super-Slide™ feature that allows the installer to easily test for supervision. The product also features a locking mechanism which secures the product to the bracket without any screws showing.
- The VES Series also features the Checkmate™ - Instant Voltage Verification feature which allows the installer to check the voltage without removing the signal.
- The VES Series strobe has a minimal operation current and has a minimum flash rate of 1Hz and can vary up to 2Hz regardless of input voltage.
- The VES Series appliances are UL 464 and UL 1638 listed for use with fire protective systems and are warranted for three years from date of purchase.

Ordering Codes

Part number	Description	Reverberant dBA @ 10ft. Per UL 464	In Anechoic Room dBA @ 10ft.
VF4029-10	24V Low Profile Evacuation Horn - Red Faceplate	70-82	100
VF4029-30	24V Low Profile Evacuation Horn - Off-White Faceplate	70-82	100
VF4006-10	24V Low Profile Evacuation Outdoor Strobe - Wall Mount, Red Faceplate	N/A	N/A
VF4006-30	24V Low Profile Evacuation Outdoor Strobe - Wall Mount, Off-White Faceplate	N/A	N/A
VF4007-10	24V Low Profile Evacuation Outdoor Horn/ Strobe - Wall Mount, Red Faceplate	70-82	100
VF4007-30	24V Low Profile Evacuation Outdoor Horn/ Strobe - Wall Mount, Off-White Faceplate	70-82	100
VF4008-00	Outdoor Enclosure	N/A	N/A

Notes: The VES Outdoor Series is listed for outdoor use. Indoor Operating Temperature: 32° to 120°F (0° to 49°C). Outdoor Operating Temperature: -31° to 150°F (-35° to 66°C).

For nominal and peak current across UL regulated voltage range for filtered DC power and unfiltered (FWR [Full Wave Rectified]) power, see installation manual.

VES does not recommend using a coded or pulsing signaling circuit with any of our strobe products

Horn Mode	Minimum dBA @ 10ft. per UL464 (HIGH)	Minimum dBA @ 10ft. per UL464 (LOW)	Regulated 24VDC Max. Operating @ High Setting (mA)
Temp 3 2400Hz	78	71*	28
Temp 3 Mechanical	76	70*	25
Temp 3 Chime	70*	66*	15
Continuous 2400Hz	81	74*	28
Continuous Mechanical	80	72*	25
Continuous Chime	70*	66*	15
Whoop	82	69*	56

*Operating the horn in this mode at this voltage will result in not meeting the minimum UL reverberant sound level required for public mode fire protection service. These settings are acceptable only for private mode fire alarm use. Use the high dBA setting for public mode application (not applicable when using the chime tone. The chime tone is always private mode).

Notes: The sound output for the temporal 3 tone is rated lower since the time the horn is off is averaged into the sound output rating. While the horn is producing a tone in the temporal 3 mode its sound pressure is the same as the continuous mode.

To obtain the horn/strobe current draw, add the strobe current draw and the horn current draw.

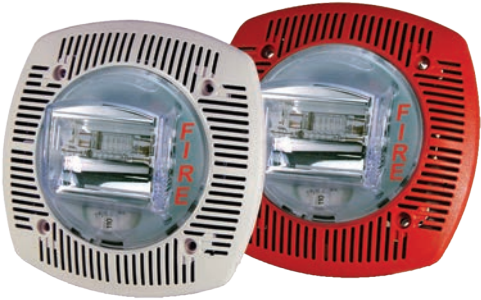
VES Outdoor Product Strobe Current Ratings

Candela	75cd
24 VDC	112mA
UL Max ¹	180mA

¹ RMS current ratings are per UL average RMS method. UL max current rating is the maximum RMS current within the listed voltage range 16-33VDC for 24VDC units. For strobes the UL max current is usually at the minimum listed voltage 16VDC for 24VDC units. For audibles the max current is usually at the maximum listed voltage. For unfiltered FWR ratings, see installation manual.

Wall Mount VF4022-X0 Low Profile Selectable Candela Speaker/ Strobe

VF4032-X0 Low Profile Fixed Candela Speaker/ Strobe



Standard Features

- FM Approved, UL 1480/UL 1971/UL 2043 Listed
- 24VDC Tamperproof Selectable Candela Selections of 15, 30, 60, 75 and 110.
- 24VDC Fixed 15/75 Candela.
- Unit Dimension: 6.1" Square X 1.88" Deep
- Wall Mounting to a standard 4" Square X 2-1/8" Deep Back Box
- High Quality dBA Output (Intelligible)
- Frequency Range 400-4000Hz
- Screw Terminals, Separate In/Out Wiring (12-18 Gauge)
- Field Selectable Power Taps: 1/8W, 1/4W, 1/2W, 1W, 2W, 4W
- Speaker Voltage 25 or 70.7 VRMS Standard, Field Selectable
- To Synchronize Use the VES Synchronization Control Module
- Tamperproof Grill
- Xenon Strobe Maintains Constant Flash Rate (1Hz) Regardless of Input Voltage¹
- Faceplate available in Red or Off-White

Product Overview

- The VES VF4022 and VF4032 Series are wall mount, selectable candela speaker/strobes designed to meet code requirements for audio, visual and voice communications. The VF4022 and VF4032 Series are quality speaker products that offer both dependable evacuation signaling and visual alarms, or a combination of both. The high output tamperproof candela selections are 15, 30, 60, 75, 110. A fixed 15/75 candela unit is also available.
- The VES series can be mounted in a 4" square x 2-1/8" deep back box, an extension ring is not needed.
- The VF4022 and VF4032 Series provides a 25 or 70.7 VRMS speaker with field selectable power taps of 1/8W, 1/4W, 1/2W, 1W, 2W or 4W. The VES strobes can be synchronized by using the VES Synchronization Control Module, FACP's or power supplies that include the VES Synchronization Protocol.
- The VF4022 and VF4032 Series grills are constructed of high impact textured plastic. The VF4022 and VF4032 are warranted for 3 years from the date of purchase. The VES devices are UL listed for fire protective services per UL 1480, the selectable candela strobe unit is listed to UL 1971 and the 15/75 unit is listed to UL 1638 and UL 1971.



Speaker dBA @ 10ft.		
Input Watts	25 Volts	70.7 Volts
1/8	74.6 dBA	73.7 dBA
1/4	77.7 dBA	76.7 dBA
1/2	80.5 dBA	79.6 dBA
1	83.1 dBA	82.5 dBA
2	85.6 dBA	85.4 dBA
4	87.9 dBA	87.9 dBA

VF4024 Ceiling Mount Strobe Current Ratings						
Candela	15cd	30cd	60cd	75cd	110cd	15/75cd
24 VDC	55mA	63mA	88mA	112mA	136mA	63mA
UL Max ¹	78mA	96mA	137mA	180mA	224mA	96mA

¹ RMS current ratings are per UL average RMS method. UL maximum current rating is the maximum RMS current within the listed voltage range 16-33VDC for 24VDC units. For strobes the UL max current is usually at the minimum listed voltage 16VDC for 24VDC units. For audibles the maximum current is usually at the maximum listed voltage. For unfiltered FWR ratings, see installation manual.

Ordering Codes

Part number	Description
VF4022-10	Low Profile Selectable Candela Wall Mount Speaker/ Strobe - Red Faceplate
VF4022-30	Low Profile Selectable Candela Wall Mount Speaker/ Strobe - Off-White Faceplate
VF4032-10	Low Profile Fixed Candela (15/75) Wall Mount Speaker/ Strobe - Red Faceplate
VF4032-30	Low Profile Fixed Candela (15/75) Wall Mount Speaker/ Strobe - Off-White Faceplate

Notes:
 The VF4022 and VF4032 Series is not listed for outdoor use.
 Operating temperature: 32° to 120°F (0° to 49° C).
 VES does not recommend using a coded or pulsing signaling circuit with any of our strobe products.

Architects and Engineers Specifications

The fire alarm speaker shall be VES VF4022/ VF4032 or equivalent. The speaker shall be capable of producing alarm tones or voice on all 25 or 70.7 VRMS audio systems. The speaker shall provide incremental tap settings of 1/8, 1/4, 1/2, 1, 2 or 4 watts. Minimum dBA ratings at 1/4 watt shall be 76.7dBA and at 4 watts 87.9dBA. Tap settings shall be adjustable with field selectable jumper pins. The speaker shall also have an optional visual signal capability. The visual signal shall have a 1Hz flash rate regardless of input voltage. All field wiring connections shall be made via separate in-out terminal connections and the speaker or speaker strobe shall be UL, CSFM and BS&A/MEA listed and comply with all local, state and federal fire alarm codes/standards.

Ceiling Mount Speaker/ Strobes



VF4020-X0 Low Profile Speaker

VF4024-X0 Low Profile Speaker/ Strobe

Standard Features

- UL 1480/UL 1971/UL 2043 Listed
- 24VDC Tamperproof Selectable Candela Selections of 15, 30, 75, 95 and 115.
- Unit Dimension: 6.1" Square X 1.88" Deep
- VF4024 Ceiling Mounting to a standard 4" X 2-1/8" Deep Back Box
- VF4020 Ceiling or Wall Mounting to a standard 4" X 2-1/8" Deep Back Box
- High Quality dBA Output (Intelligible)
- Frequency Range 400-4000Hz
- Screw Terminals, Separate In/Out Wiring (12-18 Gauge)
- Field Selectable Power Taps: 1/8W, 1/4W, 1/2W, 1W, 2W, 4W
- Speaker Voltage 25 or 70.7 VRMS Standard, Field Selectable
- To Synchronize Use the VES Synchronization Control Module
- Tamperproof Grill
- Xenon Strobe Maintains Constant Flash Rate (1Hz) Regardless of Input Voltage¹
- Faceplate available in Red or Off-White

Product Overview

- The VES VF4024 is a ceiling mount, selectable candela speaker/strobe and the VF4020 is a ceiling or wall mount speaker designed to meet code requirements for audio, visual and voice communications. The VF4020 and VF4024 Series are quality speaker products that offer both dependable evacuation signaling and visual alarms, or a combination of both. The VF4024 has high output tamperproof candela selections are 15, 30, 75, 95 and 115.
- The VF4020 and VF4024 Series can be mounted in a 4" square x 2-1/8" deep back box, an extension ring is not needed.
- The VF4020 and VF4024 Series provides a 25 or 70.7 VRMS speaker with field selectable power taps of 1/8W, 1/4W, 1/2W, 1W, 2W or 4W. The VF4024 strobes can be synchronized by using the VES Synchronization Control Module, FACP's or power supplies that include the VES Synchronization Protocol.
- The VF4020 and VF4024 Series grills are constructed of high impact textured plastic. The VF4020 and VF4024 are warranted for 3 years from the date of purchase. The VF4020 and VF4024 devices are UL 1971 listed for use with fire protective signaling systems.

Speaker dBA @ 10ft.

Input Watts	25 Volts	70.7 Volts
1/8	74.6 dBA	73.7 dBA
1/4	77.7 dBA	76.7 dBA
1/2	80.5 dBA	79.6 dBA
1	83.1 dBA	82.5 dBA
2	85.6 dBA	85.4 dBA
4	87.9 dBA	87.9 dBA

VF4024 Ceiling Mount Strobe Current Ratings

Candela	15cd	30cd	75cd	95cd	115cd
24 VDC	72mA	88mA	176mA	200mA	214mA
UL Max ¹	120mA	130mA	272mA	318mA	360mA

¹ RMS current ratings are per UL average RMS method. UL maximum current rating is the maximum RMS current within the listed voltage range 16-33VDC for 24VDC units. For strobes the UL max current is usually at the minimum listed voltage 16VDC for 24VDC units. For audibles the maximum current is usually at the maximum listed voltage. For unfiltered FWR ratings, see installation manual

Ordering Codes

Part number	Description
VF4020-10	Low Profile Ceiling and Wall Mount Speaker - Red Faceplate
VF4020-30	Low Profile Ceiling and Wall Mount Speaker - Off-White Faceplate
VF4024-10	Low Profile Ceiling Mount Speaker/ Strobe - Red Faceplate
VF4024-30	Low Profile Ceiling Mount Speaker/ Strobe - Off-White Faceplate

Notes:

The VF4020/ VF4024 Series is not listed for outdoor use.

Operating temperature: 32°to 120°F (0° to 49° C).

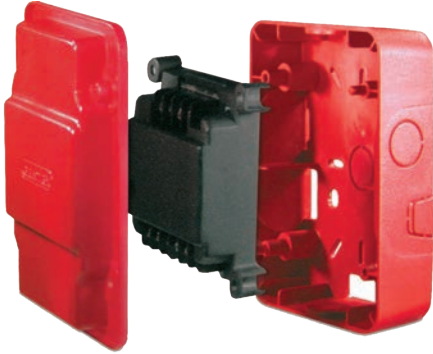
VES does not recommend using a coded or pulsing signaling circuit with any of our strobe products.

Architects and Engineers Specifications

The fire alarm speaker shall be VES VF4020/ VF4024 or equivalent. The speaker shall be capable of producing alarm tones or voice on all 25 or 70.7 VRMS audio systems. The speaker shall provide incremental tap settings of 1/8, 1/4, 1/2, 1, 2 or 4 watts. Minimum dBA ratings at 1/4 watt shall be 76.7dBA and at 4 watts 87.9dBA. Tap settings shall be adjustable with field selectable jumper pins. The speaker shall also have an optional visual signal capability.

The visual signal shall have a 1Hz flash rate regardless of input voltage. All field wiring connections shall be made via separate in-out terminal connections and the speaker or speaker strobe shall be UL, CSFM and BS&A/MEA listed and comply with all local, state and federal fire alarm codes/standards.

VF4009-X0 Gangable Synchronization Control Module



Standard Features

- UL 464 and UL 1971 Listed
- Synchronize Horn and Strobe With the Use of Only Two Wires
- Easy to Install
- Module is Rated for 3 Amps
- Continuous Current and 5 Amps Surge or Inrush Current
- Synchronizes to 1Hz Flash Rate
- Operates 1 Class 'A' Circuit or 2 Class 'B' Circuits at 3 Amps per Circuit.
- Dual Synchronization Module Only When Using the 2 Class 'B' Circuits.
- A Green LED Status Indicator to Signal Operation of Module.
- Option to Silence the Horn While Strobes Continue to Flash When Using Temporal 3 Mode.
- VF4009 Operates the VF4003/ VF4004, VF4000/ VF4001/ VF4002, VF4022/ VF3032, VF4020/ VF4024 and VF4027 Series.
- Three Year Warranty From Date of Purchase.

Product Overview

- The VES VF4009 control modules are designed to provide an easy way to synchronize multiple horns as well as strobe light flashes using only two wires in instances where a synchronized flash is required.
- When the module is in temporal 3 mode, it has the capability to synchronize multiple horn signals and the ability to silence the horn while allowing the strobes to continue to flash. In unison mode, the horn cannot be silenced while maintaining strobe operation.
- By incorporating the control module, the control module will control the power to the horns to produce the synchronized operation. The VF4009 Control Modules are warranted for three years from date of purchase.

Ordering Codes

Part number	Description
VF4009-10	Gangable Synchronization Control Module - Red
VF4009-30	Gangable Synchronization Control Module - Off-White

Notes:

The VF4009 Modules come with own back box and cover plate.

Dimensions of Module: 3.85"H x 3.82"W x 1.32"D

Dimensions of Box: 5.57"H x 4.55"W x 2.39"D

A green LED status indicator will flash once every four seconds if zone 1 is operational. The LED will flash twice every four seconds if zones 1 and 2 are operational.



Miscellaneous



Fire Document Enclosure

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Ancillary Enclosure

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Disablement Switch Enclosure

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Audio Visual Indicator Units

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10.25 Amp Power Supply

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6 & 10 Amp Power Extender

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VF071X-X0

Fire Document Enclosure



Standard Features

- Matches design & color scheme for standard Elite control panel ranges
- Easy to install
- Key Lockable
- Designed for versatility
- Choice of small or large capacity enclosure



Available in Gray

Product Overview

- Another addition to the VES range, the document box is designed to complement the design & color of the Elite range of control panels. The standard version Document Box will hold up to 50 A4 sheets of information on the Fire Detection or other security systems within a premises. The deep version will hold up to 100 sheets.
- The "Doc Box" also doubles up as a Key Box providing 7 easily accessible formed key hooks inside the enclosure.

Technical Specifications

Construction: 18AWG sheet steel

Dimensions:

VF0711 / VF0713: 14.5"W x 12.2"H x 3.4" D

VF0710 / VF0712: 14.5"W x 12.2"H x 2.5" D

Weight: 6.6lb

Finish (lid & box): RAL3002 (Red) or BS 00 A 05 (Gray)

Finish (product labels): BS 00 A 05 (Gray)

Panel Options

VF0710-xx: Standard

VF0711-xx: Deep

VF0712-xx: Standard w/ Tamper

VF0713-xx: Deep w/ Tamper

xx = 10 (Red) or 40 (Gray)

VF073X-X0

Ancillary Enclosure



Standard Features

- Matches design & color scheme for standard Elite control panel ranges
- Easy to install
- Key Lockable
- Designed for versatility
- Three sizes of enclosure to choose from

Product Overview

- The Ancillary enclosure is designed to provide an organized and secure mounting enclosure for I/O cards and SLC devices. The Ancillary enclosure is manufactured in three different sizes, two different colors and with a tamper option.
- The Ancillary Enclosure is customized with mounting requirements and multiple conduit entries to fit module configurations depicted in the table below.

Panel Options (Modules must be purchased separately)

Part No.	Enclosure Size	I/O Modules	SLC Modules
VF0730-xx*	14.5"W x 12.2"H x 3.4" D	0	2
	14.5"W x 12.2"H x 3.4" D	1	2
	14.5"W x 12.2"H x 3.4" D	2	0
VF0731-xx*	14.5"W x 18.9"H x 4.25" D	0	6
	14.5"W x 18.9"H x 4.25" D	1	4
	14.5"W x 18.9"H x 4.25" D	2	2
VF0732-xx*	14.5"W x 24"H x 5" D	3	0
	14.5"W x 24"H x 5" D	0	8
	14.5"W x 24"H x 5" D	1	6
	14.5"W x 24"H x 5" D	2	4
VF0732-xx*	14.5"W x 24"H x 5" D	3	2
	14.5"W x 24"H x 5" D	4	0

* xx = 10 (Red) or 40 (Gray)

Technical Specifications

Construction:

VF073x: 18AWG sheet steel

VF073x: 16AWG sheet steel

VF073x: 16AWG sheet steel

Dimensions:

VF0730: 14.5"W x 12.2"H x 3.4" D

VF0731: 14.5"W x 18.9"H x 4.25" D

VF0732: 14.5"W x 24"H x 5" D

Finish (lid & box): RAL3002 (Red) or BS 00 A 05 (Gray)

Finish (product labels): BS 00 A 05 (Gray)

VF0716-X0

Disablement Switch Enclosure



Standard Features

- Matches design & color scheme for standard Elite control panel ranges
- Easy to install
- Key Lockable
- Designed for versatility
- 5-Individual Key switches for activation of pre-programmed disablements

Product Overview

- Another addition to the VES range, the disablement switch enclosure provides a controlled and organized method for the activation of the pre-programmed disablements or other functions. A terminal strip behind each key switch provides for easy connections.

Panel Options

VF0716-xx: Standard

xx = 10 (Red) or 40 (Gray)

Technical Specifications

Construction: 18AWG sheet steel

Dimensions: 14.5"W x 12.2"H x 3.4" D

Weight: 6.6lb

Finish (lid & box): RAL3002 (Red) or BS 00 A 05 (Gray)

Finish (product labels): BS 00 A 05 (Gray)

VF191X-40

Audio Visual Indicator Units

Audible and visual indicator units Providing remote indication of the status of the fire alarm system



Standard Features

- Available with red or yellow high brightness, flashing LED indicators
- Can be used for Fire alarm warning, activated by a sounder circuit or to indicate and initiate an active isolation
- Optional silence buzzer keyswitch
- Disable buzzer option via internal jumper link
- Optional keyswitch to perform isolation
- Terminations for incoming and outgoing wiring
- Surface mounting box supplied

Product Overview

- A range of indicator units with either red or yellow indicators to provide audible and visual status of alarms, isolations or other functions associated with the fire alarm or other systems.
- These units are available with a keyswitch to silence the internal buzzer or a keyswitch to illuminate the indicator and buzzer and provide a volt free contact for ancillary control functions when the keyswitch is operated.
- All units can mount to standard surface or flush single gang mounting boxes.

Technical Specifications

Construction: 18AWG sheet steel

Dimensions: 3.8"W x 3.8"H x 1.9" D

Color (lid & box): BS 00 A 05 (Gray)

Voltage: 18 to 30 V DC

Power Consumption: 25 milliamps at 24V

Operating temperature: 23°F to 122°F

Operating humidity: To 95% non-condensing

Ordering Codes

Part number	Description
VF1910-40	Red Fire alarm indicator
VF1911-40	Red Fire alarm indicator with buzzer silence keyswitch
VF1912-40	Yellow alarm indicator
VF1913-40	Yellow alarm indicator with control keyswitch
VF1914-00	Flush Mounting Collar (will fit single gang deep flush back box)

VF8140 & VF8141 Series

10.25Amp Power Supply



Standard Features

- Continuous 8A load output while charging fully depleted batteries
- Charges up to 40Ah batteries
- Listed to UL 1481 & 864
- 120V to 240V AC input
- AC fail monitoring with LED indication and output
- Battery disconnection monitoring with LED indication and output
- Low battery monitoring with LED indication and output
- Dynamic Earth fault monitoring with LED indication and output
- Deep-Discharge Prevention
- Temperature compensated battery charging
- Battery Boost Circuitry

Product Overview

- The VF1840 & VF1841 is a UL listed, universal input switching power supply capable of delivering a full 192W of continuous power for fire alarm systems.
- Suitable for charging a range of sealed lead acid batteries from 7Ah to 40Ah, the VF8140 & VF8141 power supply features complete monitoring of primary and secondary power sources with fully temperature compensated battery charging and battery high impedance monitoring.

Technical Specifications

Construction: 18AWG sheet steel

Dimensions - std: 14.41"W x 18.72"H x 4.25" D

Dimensions - Deep: 14.41"W x 18.72"H x 7.75" D

Operating Environment: 32°F - 102°F - 93% Hum

Input Voltage: 120 to 240V AC 50/60Hz

Output Voltage: 24V DC

Total Output Current: 10.25A

Battery Charge Current: 2.25A

Load Current: 8.0A (with flat battery)

Trouble Outputs rating: 30 Vdc 1A max.

Mains fuse: 5A 20mm HRC

Load fuses: 10A (self resetting)

Finish (lid & box): RAL3002 (Red) or BS 00 A 05 (Gray)

Finish (product labels): BS 00 A 05 (Gray)

Panel Options

VF8140-xx: 10.25 Amp Power Supply Standard Depth Cabinet up to 18 AH Batteries

VF8141-xx: 10.25 Amp Power Supply Deep Depth Cabinet up to 40 AH Batteries

xx = 10 (Red) or 40 (Gray)



PE-6SN & PE-10SN Power Extenders

Voltage Regulated Remote NAC Power Extenders



Standard Features

- 120/240 VAC 50/60 Hz Input
- Two (2) Trouble Relays
- Two (2) Class A or B trigger circuit
- One (1) Programmable AUX power rated @ 3amps
- Quadrasync provides panel wide synchronization of the same or multiple brands
- Pass Thru mode allows the Outputs to match the Input Signal
- Signal Circuit Trouble Memory - Facilitates quickly locating intermittent system trouble and eliminates costly and unnecessary service calls. LED's indicate a prior fault (short, open, ground) has occurred on one or more signaling circuit outputs.
- Horn/Strobe sync protocols include: Gentex, System Sensor, Wheelock and Amseco/Potter.
- Temporal Code 3 Mode
- Configurable output circuits (DIP switch sets options for each circuit)
- Supports 7 - 55AH batteries
- Accommodates up to two (2) 12VDC/12AH batteries
- AC fail, battery presence & low battery monitoring
- Configurable output circuits (DIP switch sets options for each circuit)

Technical Specifications

Enclosure Size: 16 3/4"H x 16 1/8"W x 3 1/2"D

6 Amp Model

Voltage: 24 VDC rated @ 6 amps max

Outputs: Two (2) Class A or Four (4) Class B outputs

10 Amp Model

Voltage: 24 VDC rated @ 10 amps max

Outputs: Three (3) Class A or Six (6) Class B outputs

Product Overview

- The PE-6SN and PE-10SN are voltage regulated remote NAC Power Extenders. They may be connected to any 24VDC Fire Alarm Control Panel (FACP). Primary applications include Notification Appliance Circuit (NAC) expansion (supports ADA requirements) and will provide auxiliary power to support system accessories. The Power Extender offers an industry leading Quadrasync function that allows for multiple strobe circuits of different brands to be synchronized to flash at the same time. The panel can have four different brands each connected to its own circuit and all of the strobes flash together in addition to the horns.

Ordering Codes

Part number	Description
PE-6SN	6 Amp Notification Appliance Circuit Power Extender
PE-10SN	10 Amp Notification Appliance Circuit Power Extender

Marine



**United States Coast Guard approved
Analog Fire Alarm and system
components.**

**Coast Guard Approval Number
161.002/58/0**



US Coast Guard





Marine



Elite RSM
Marine Fire Control Panel

Pages 108-109



eView
Marine Serial Annunciator

Page 109



Marine Devices

Pages 110-111

Elite RSM

Analog Addressable
2 Loop Marine Fire Control Panel
Hochiki Protocol

VF0820-1M (Red)
VF0820-4M (Gray)



Standard Features

- Two full SLC loops allowing 254 primary addresses
- 3 programmable relays
- 5.25A power supply
- Large graphic display
- Real time clock
- Compatible with eMATRIX graphics annunciator
- Powerful, network wide cause and effects (500 total). Fully user programmable by point or zone.
- Can be networked with additional RSM and/ or Elite control panels
- Compatible with eVIEW Annunciator
- Programmable through a PC connection to the panel
- Same look and feel as Elite range
- Stores 1000 last events in history log
- Compact, stylish enclosure
- Available in Red or Gray
- 2 Programmable NAC circuits with internal synchronization support.

Product Overview

- Elite RSM is a special edition of our Elite Analog fire alarm control panels built specifically for the United States Coast Guard market.
- Available with one or two detection loops for a total of 254 primary points or 508 points using subpoints. Elite RS uses leading edge microprocessor based electronics to provide a flexible control system with high reliability and integrity.
- Suitable for the small to medium sized marine fire detection systems, Elite RSM control panels can be expanded and networked to become part of much larger systems if the need arises, therefore providing a future proof solution for any installation.
- With its large graphical display and ergonomic button and indicator layout, the Elite RSM control panel is simple and straightforward to understand for installers, commissioning engineers and end users alike.

Added Features:

Elite RSM with Network Interface Card (VF0862-xM)

- Network uses standard RS 485 cabling
- Up to 2,000 ft. between adjacent panels
- Mapped Network; Display messages for Any or All nodes

Also available:

eNET Networking Card - VF1170-xx

Trim ring - VF1071-xx

Technical Specifications

Construction: 16AWG sheet steel
Dimensions: 14.5"W x 18.9"H x 4.25" D
Weight (without batteries): 20lb
Finish (lid & box): RAL3002 (Red) or BS 00 A 05 (Gray)
Finish (product labels): BS 00 A 05 (Gray)
Mains voltage supply: 110 or 230V AC 50 or 60 Hz. (specify when ordering, default is 110V)
Mains supply fuse: 1.6A 250V
Power supply DC rating: 24V 5.25 Amps
Aux 24V supply: Fused at 500 milliamps
Battery (24 hour standby): 9Ah 12V (2 per panel) (non-networked)
Fault contact rating: 30V DC 1 Amp
Fire contact rating: 30V DC 1 Amp
Alarm contact rating: 30V DC 1 Amp
NAC output rating: 3.1V across both channels, 2.3V across any one
Detection loop: 250 milliamp output
Serial expansion port: Serial RS485
PC port: Serial RS232
Network connection: Optional network Cards allow the use of e-Net networking
NAC Synchronization: Internal Support
NAC Protocols: System Sensor, Wheelock, Gentex, Amseco
SLC Loop Cabling: 3100 feet 16 AWG, Shielded

eVIEW

Marine Analog Addressable
Serial Annunciator

VF1172-1M (Red)

VF1172-4M (Gray)



Standard Features

- Available in Red or Gray
- Up to 15 annunciators can be connected to each Elite or Elite RSM fire control panel
- Large liquid crystal display (240 x 64 pixels)
- High brightness LED indications
- Internal sounder
- Replicates all panel controls (Elite)
- Simple, two-wire serial connection
- Small, Elite style enclosure
- Removable electronics for easy installation
- 24V DC powered
- Low power consumption
- Multi language options
- Connection supervised by Elite fire control panel
- Recess mounting using optional VF1173 kit



VF2005-0M Photoelectric Smoke Sensor

The Photoelectric Smoke Sensor is particularly suited to detecting optically dense smoke typical of fires involving materials such as soft furnishings, plastic, foam or other similar materials which tend to smolder and produce large visible smoke particles.

- Automatic compensation for sensor contamination
- Uses the noise immune Digital Communication Protocol (DCP), which utilizes interrupts for fast response to fires



VF2008-0M Multi Criteria Sensor

The Multi-Criteria Smoke Sensor is particularly suited for detecting smoke produced by a wide range of combustibles found in various applications. Temperature monitoring is achieved by a thermistor placed for optimum sensitivity.

- Automatic compensation for sensor contamination
- Uses the noise immune Digital Communication Protocol (DCP), which utilizes interrupts for fast response to fires
- Non-directional smoke chamber



VF6045-0M

Fixed Temp/ Rate of Rise Heat Sensor

The Fixed Temperature/ Rate of Rise Sensors provide accurate temperature measurement data to the fire alarm control panel. These sensors are well-suited for environments where dust, cooking fumes, or other factors make the use of smoke sensors impractical.

- Uses the noise immune Digital Communication Protocol (DCP), which utilizes interrupts for fast response to fires
- Applicable for indoor and outdoor installations



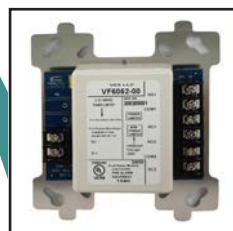
VF7001-0M 4" Sensor Base



VF7002-0M 6" Sensor Base

These common mounting bases allows for complete compatibility for all of the Analog sensors. The bases are lightweight and very thin, providing a low profile once installed. The solder-less screw terminals enable quick and easy wiring connections.

- Designed for use with all analog sensors.
- Available in 4 and 6 inch models.
- Contains a security locking tab for tamper protection.



VF6050-0M Dual Relay Module

The Dual Relay Modules have been designed to provide flexible and quick response to emergency conditions.

- Provides two independently configurable Form C contacts per address
- Contacts are rated as follows: 2A @ 30 VDC / 0.5A @ 120 VAC
- Up to 127 devices can be used on each SLC loop
- Programming is highly flexible providing 16 priority states plus zoning capability



VF6002-0M Single Input Module

The VF6002-0M Fast Response Contact Monitoring Modules are designed to be used with pull stations, water flow switches, and other applications requiring the monitoring of dry contact alarm initiating devices.

- Fast, reliable contact monitoring utilizing the VES DCP (Digital Communications Protocol)
- Two different mounting configurations
- 127 devices can be used per DCP loop
- Bi-colored indicating LED provides module status



VF6007-0M Dual Input Module

The Dual Input Monitor Module is designed for use on an Elite RSM Fire Alarm Control Panel. It provides two independent contact monitoring circuits while only utilizing one address on the SLC loop.

- Fast, reliable contact monitoring utilizing the VES DCP (Digital Communications Protocol)
- 127 devices can be used per DCP loop
- Bi-colored indicating LED provides module status



VF6024-0M Fast Response Contact Module

The Fast Response Contact Monitoring Modules are designed to be used with pull stations, water flow switches, and other applications requiring the monitoring of dry contact devices.

- Single input contact monitor
- Fast, reliable contact monitoring utilizing the VES DCP (Digital Communications Protocol)
- 127 devices can be used per DCP loop



VF3029-1M Addressable Manual Pull Stations

The VF3029-1M are the VES series of addressable manual pull stations that provide a fast and practical means of manually initiating a fire alarm signal. Both single action and dual action manual pull stations are available.

- Addressable integrated design
- All metal construction
- Single and dual action models available
- Extremely easy to operate



VF4002-XO Low Profile Evacuation Horn/ Strobe

The VES Signal Series is a low profile horn/strobe combination that offers dependable audible and visual alarms and the lowest current available.

- Super-Slide™ - Ease of Supervision Testing
- Checkmate™ - Instant Voltage Verification
- Synchronize Horn/ Strobe with VES Series Control Module
- Silence horn while strobes remain flashing



VF4006-XO 24V Low Profile Evacuation Outdoor Strobe

The Outdoor VES Series offers dependable visible and/or audible alarms for all outdoor Marine needs.

- Super-Slide™ - Ease of Supervision Testing
- Checkmate™ - Instant Voltage Verification
- Switch Selection for High dBA
- Tamperproof Re-entrant Grill



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