

## 2019-20 PRODUCT GUIDE





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 range of fire detection products including the all new L@titude and Compas fire alarm control panels. This 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.

# CONTENTS

L@titude.....	4
Compas.....	8
L@titude Network Vision Annunciator.....	12
Compas Network Vision Annunciator.....	13
4 Channel NAC Panel Module .....	14
8 Channel Conventional Zone Panel Module.....	14
16 Channel I/O Interface.....	15
Media Gateway™ Panel Module .....	16
8 Channel Relay Panel Module.....	17
Elite RS.....	18
Elite Demo Case.....	19
eNET .....	20
L@tiView .....	21
eVIEW .....	22
Single / Double Action Addressable Pull Station .....	24
AMS Manual Pull Station.....	25
Fixed Temp / Rate of Rise Heat Sensor.....	26
Photoelectric Smoke Sensor .....	28
Multi-Criteria Sensor - Smoke & Heat .....	30
Multi-Criteria Sensor - CO, COHb, Smoke, Heat.....	32
6" Analog Low Frequency Sounder Base .....	34
6" Analog Sounder Base.....	35
Analog Duct Sensors.....	36
Analog Duct Sensor Remote Accessories.....	37
Fast Response Contact Modules.....	38
Fast Response Contact Modules (Class A Wiring) .....	40
Fast Response Contact Modules.....	41
Supervised Output Module .....	42
Supervised Output Modules (Class A Wiring).....	43
Dual Relay Modules.....	44
Dual Input Monitor Module .....	45
Conventional Zone Module .....	46
Handheld Programmer .....	47
Elite XT .....	48
XT+ .....	50
Releasing System Peripherals.....	52
Elite CP .....	54
Elite CP Annunciator.....	56
Fixed Temperature Heat Detector .....	57
Conventional Photoelectric Smoke Detector .....	58
4" and 6" Conventional Base .....	60
Conventional Manual Pull Stations.....	61
VoiceAlert (Master and Distributed Panel) .....	62
Wall Mount Horn, Horn / Strobes.....	64
Wall Mount Speaker / Strobes.....	66
Ceiling Mount Speaker / Strobes.....	67



**Single Aperture**



**Double Aperture  
Includes Zone LED Module and Printer**

### Standard Features

- UL Listed (Tenth Edition) and FM Approved
- 2 to 8 loop or 2 to 16 loop versions
- 400mA loop current
- 4 programmable NACs; Class B or 2 Class A with internal synchronization
- 5.25 A or 10.25 A power supply options
- 3 programmable inputs and 5 programmable relay outputs
- 7 inch, full-color resistive touch screen with intuitive user interface
- Up to 24 programmable soft "function keys"
- Up to 64 user login accounts
- Hard-wired fire and trouble routing inputs and outputs
- Modular and expandable electronics
- 400 subaddress points per loop (800 per loop module)
- Option to "invert" inputs and outputs
- 5000 programmable cause and effects; over 50,000 inputs and outputs
- Can be networked with programmable functionality
- Programming via USB port to PC or memory stick
- L@tiView Graphical PC User Interface



## Technical Specifications

### 2 to 8 LOOP (4 SLOT) ENCLOSURE

Size	<b>Standard Cabinet</b> - 420mm (W) x 590mm (H) x 153mm (D), or 16.5in (W) x 23.2in (H) x 6in (D) <b>Deep Cabinet</b> - 420mm (W) x 590mm (H) x 203mm (D), or 16.5in (W) x 23.2in (H) x 8in (D)
Construction	Mild sheet steel enclosure, 1.5 mm
Cable Entry	<b>Standard Cabinet</b> - 28 knockouts top, 19 knockouts back, 1 knockout each side, 2 knockouts bottom <b>Deep</b> - 38 knockouts top, 19 knockouts back, 1 knockout each side, 2 knockouts bottom
Optional Semi-Flush Mounting Kit	Semi-Flush Mounting Collar Kit KM5FCRD - Red KM5FCGY - Gray KM5FCBS - Black
Battery Capacity	<b>Standard Cabinet</b> - Up to 28 Ah (Power Sonic PS-12280) <b>Deep Cabinet</b> - Up to 40 Ah (Power Sonic PS-12400)

### 2 to 16 LOOP (8 SLOT) ENCLOSURE

Size	<b>Standard Cabinet</b> - 540mm (W) x 720mm (H) x 160mm (D), or 21.3in (W) x 28.3in (H) x 6.3in (D) <b>Deep Cabinet</b> - 540mm (W) x 720mm (H) x 212mm (D), or 21.3in (W) x 28.3in (H) x 8.3in (D)
Construction	Mild sheet steel enclosure, 1.5 mm
Cable Entry	<b>Standard Cabinet</b> - 38 knockouts top, 25 knockouts back, 2 knockouts each side, 2 knockouts bottom <b>Deep Cabinet</b> - 50 knockouts top, 25 knockouts back, 2 knockouts each side, 2 knockouts bottom
Battery Capacity	<b>Standard Cabinet</b> - Up to 28 Ah (Power Sonic PS-12280) <b>Deep Cabinet</b> - Up to 40 Ah (Power Sonic PS-12400)

### ALL MODELS

Finish	Epoxy powder coated
Color	Enclosure <input checked="" type="radio"/> Red (RAL3002) <input type="radio"/> Gray (BS 00 A 05) <input checked="" type="radio"/> Black (RAL9005)  Fascia <input type="radio"/> Signal White (RAL9003)
Power supply voltage	115 V AC or 230 V AC
Power supply rating at 24V DC	5.25 A (charges up to 60 Ah) 10.25 A (charges up to 100 Ah)
Display	Full-color 800 x 480 LCD with resistive touch screen and automatic backlight dimming
Software zones	2000
Software groups	5000
Cause and Effects	5000
Event log	10,000 events, 1 second resolution. Filterable and printable.
Detection loops	2 to 16 added 2 at a time (S758 dual loop cards)
Detection loop current	400 mA each
AUX 24V Output	2; each rated at 900 mA
NACs	4; each rated at 2.5 A. Class B or 2 Class A.
Programmable Relay Outputs	5; 30 V DC 1 Amp
Programmable Inputs	3; designed to be activated by voltage-free contacts
Network Connection	Optional network card provides communication for networking 127 fire control panels
NAC Synchronization	Internal Support of System Sensor, Wheelock, Gentex, and Amseco protocols
Printer (OPTIONAL)	40 column, front-loading thermal
Zone LED Indicators (OPTIONAL)	Up to 3 banks of 48 (144) as standard
Operating Temperature	23° F to 120° F ( -5° C to 49° C)
Operating Humidity	to 95% (non condensing)

## Product Overview

The all new L@titude product range of fire alarm control equipment combines the very latest hardware and software to produce a control and indication system, which is powerful and sophisticated, yet simple to use and understand. The flexibility of the L@titude platform is such that it can be re-configured to realize many other control and indication applications, with direct integration into intelligent buildings.

Moving away from the simple, price driven competitive model used by most manufacturers today, the L@titude concept is designed to add value to System Designers, Integrators, Service Providers, and end users. Developed from the “ground up” and using some of the most advanced technology available, L@titude is designed as one of the most powerful, intelligent, and technically robust fire alarm products available.

Not only do the products and services offered under the L@titude brand provide solutions to the most technically challenging applications in life safety, L@titude will deliver added value, market advantage, and a competitive edge to your business.



## Optional Panel Peripherals

- **Dual Loop Panel Module (S758)**  
The Dual Loop Panel Module monitors loop device status and provides status to the panel processor. It holds device configurations and operates in a standalone manner when catastrophic failures occur.
- **16 Channel I/O Interface Card (S560)**  
The 16 Channel I/O Interface enhances the versatility of the alarm system by providing additional input and output capabilities to the L@titude Fire Alarm Control Panel. Inputs or outputs can be selected for up to 16 individual channels, and are configured in the same way as devices connected to addressable loops of the panel. The 16 Channel I/O Interface can be configured to contribute or act upon cause and effect logic.
- **Media Gateway™ Panel Module (S788)**  
The Media Gateway Panel Module provides connectivity to monitoring centers using IP (Sur-Gard), or dial-up connectivity. The Media Gateway may also be used to meet integration application requirements.
- **8 Channel Relay Panel Module (S791)**  
The 8 Channel Relay Panel Module has 8 voltage-free changeover relay contacts, each of which can be individually programmed. All outputs are configurable in the same way as devices connected to the loops and all may be acted upon by cause and effect logic. These boards are typically used in applications which require more than the five standard relay outputs, such as signaling to other systems or plant control.
- **Network Module (S723)**  
The L@titude Network Module provides enhanced high-speed communication for networking fire control panels. The network provided by this module can support combinations of L@titude Fire Alarm Control Panels and L@titude Vision units. L@titude Fire Alarm Control Panels can receive events from other panels in the network. The Class X networking used in conjunction with the Network Module provides tolerance against open and short circuit trouble conditions.
- **Printer (S768)**  
The L@titude Printer is an optional feature for printing fire system events as they occur. The printer is located on the fascia, below the Zone LEDs (if present). It is a thermal printer and never requires replacement ink. Printing is performed on heat-sensitive paper rolls. A trouble message is reported when the paper runs out. The printer includes a front-loading feature for replacing paper rolls.
- **Zone LED Module (S771)**  
The Zone LED module contains 48 LEDs and is connected to the LCD Main Processor Board of the L@titude Fire Alarm Control Panel. A maximum of three Zone LED modules can be connected to provide the fascia with 144 Zone LED indicators.
- **4 Channel NAC Panel Module (S793)**  
**FUTURE ENHANCEMENT**  
Additional NAC output capability can be added to by using 4 Channel NAC Modules. These boards have 4 supervised NAC outputs, each of which can be individually programmed. The circuits can be configured for class A or B operation. These circuits can be configured to act upon cause and effect logic.
- **8 Channel Conventional Zone Panel Module (S792)**  
**FUTURE ENHANCEMENT**  
The 8 Channel Conventional Zone Panel Module has 8 supervised detection circuits (Class B). Each circuit can support up to 20 conventional detectors and approved devices. Individual circuits may be configured for trigger resistor or short circuit activation. These circuits may be used for any of the standard input actions and can be configured to contribute to cause and effect logic. Each pair of circuits (e.g., 1 and 2, 3 and 4, etc.) can be joined to form a single Class A configuration.
- **16 Channel I/O Interface Panel Module (S772)**  
**FUTURE ENHANCEMENT**  
The 16 Channel I/O Interface Panel Module will provide the same functionality as the 16 Channel I/O Interface Card, with the convenience of a plug-in-module.

## Panel Model Numbers

LV 1 0 3 H# -14 (abcd)

If no peripheral cards are ordered, this portion of the model number should be omitted.

- OPTIONAL PERIPHERAL CARDS
- PRINTER, ZONE LEDs, & APERTURE
- CABINET COLOR
- LOOP MODULES & COMMUNICATION MODULES
- POWER SUPPLY
- LANGUAGE
- ENCLOSURE STYLE
- PRODUCT STYLE

Panel Options	Valid Entries	Description
Product Style	LV	L@titude Fire Alarm Control Panel
	LR	L@titude Network Vision Annunciator
Enclosure Style	1	4 Slot Standard Enclosure
	2	4 Slot Standard Plex-Door Enclosure
	3	4 Slot Deep Enclosure
	4	4 Slot Deep Plex-Door Enclosure
	5	4 Slot Extra Deep Guard Station Enclosure - FUTURE ENHANCEMENT
	6	4 Slot 19" Rack Mount Enclosure - FUTURE ENHANCEMENT
	7	8 Slot Standard Enclosure - 16 Loop
	8	8 Slot Standard Plex-Door Enclosure - 16 Loop
	9	8 Slot Deep Enclosure - 16 Loop
	A	8 Slot Deep Plex-Door Enclosure - 16 Loop
Language	C	Annunciator
	0	English
	1	Portuguese
	2	Spanish
Power Supply	3	Taiwanese
	0	None
	1	5.25 A 115V
	2	5.25 A 230V
Loop Modules & Communication Modules	3	10.25 A (auto-voltage sensing)
	00	Not Fitted
	NC	Network Module only (Network Vision Annunciator)
	H#	2-Loop Panel Module, Hochiki Protocol
	I#	2-Loop Panel Module, Hochiki Protocol, and Media Gateway
	J#	2-Loop Panel Module, Hochiki Protocol, and Network Module
Cabinet Color	K#	2-Loop Panel Module, Hochiki Protocol, Network Module, and Media Gateway
	1	● Red (RAL3002)
	4	● Gray (BS 00 A 05)
Printer, Zone LEDs & Aperture	6	● Black (RAL9005)
	0	No Printer / No Zone LEDs
	1	No Printer / No Zone LEDs, Blank 2nd Aperture
	3	Printer / No Zone LEDs
	4	Printer / 48 Zone LEDs
	5	No Printer / 48 Zone LEDs
	6	No Printer / 96 Zone LEDs
	7	No Printer / 144 Zone LEDs
Optional Peripheral Cards	a	16 Channel I/O Panel Module (S772) - FUTURE ENHANCEMENT
	b	8 Channel Relay Panel Module (S791)
	c	8 Channel Conventional Zone Module (S792) - FUTURE ENHANCEMENT
	d	4 Channel NAC Module (S793) - FUTURE ENHANCEMENT

ANALOG ADDRESSABLE

RELEASING

CONVENTIONAL

VOICEALERT

NOTIFICATION APPLIANCES

# Compas | Analog Addressable Fire Alarm Control Panels



## Standard Features

- UL Listed (Tenth Edition) and FM Approved - PENDING
- Supports Hochiki and Apollo Protocols
- 2 to 8 loop or 2 to 16 loop versions
- 400mA loop current
- 4 programmable NACs; Class B or 2 Class A with internal synchronization
- 5.25 A or 10.25 A power supply options
- 3 programmable inputs and 5 programmable relay outputs
- 7 inch, full-color resistive touch screen with intuitive user interface
- Up to 24 programmable soft "function keys"
- Up to 64 user login accounts
- Hard-wired fire and trouble routing inputs and outputs
- Modular and expandable electronics
- 400 subaddress points per loop (800 per loop module)
- Option to "invert" inputs and outputs
- 5000 programmable cause and effects; over 50,000 inputs and outputs
- Can be networked with programmable functionality
- Programming via USB port to PC or memory stick
- L@tiView Graphical PC User Interface

## Product Overview

The all new Compas product range of fire alarm control equipment combines the very latest hardware and software to produce a control and indication system, which is powerful and sophisticated, yet simple to use and understand. The flexibility of the Compas platform is such that it can be re-configured to realize many other control and indication applications, with direct integration into intelligent buildings.

Moving away from the simple, price driven competitive model used by most manufacturers today, the Compas concept is designed to add value to System Designers, Integrators, Service Providers, and end users. Developed from the "ground up" and using some of the most advanced technology available, Compas is designed as one of the most powerful, intelligent, and technically robust fire alarm products available.

Not only do the products and services offered under the Compas brand provide solutions to the most technically challenging applications in life safety, Compas will deliver added value, market advantage, and a competitive edge to your business.





## Technical Specifications





### 2 to 8 LOOP (4 SLOT) ENCLOSURE

Size	<b>Standard Cabinet</b> - 420mm (W) x 590mm (H) x 153mm (D), or 16.5in (W) x 23.2in (H) x 6in (D) <b>Deep Cabinet</b> - 420mm (W) x 590mm (H) x 203mm (D), or 16.5in (W) x 23.2in (H) x 8in (D)
Construction	Mild sheet steel enclosure, 1.5 mm
Cable Entry	<b>Standard Cabinet</b> - 28 knockouts top, 19 knockouts back, 1 knockout each side, 2 knockouts bottom <b>Deep</b> - 38 knockouts top, 19 knockouts back, 1 knockout each side, 2 knockouts bottom
Optional Semi-Flush Mounting Kit	Semi-Flush Mounting Collar Kit KM5FCRD - Red KM5FCGY - Gray KM5FCBS - Black
Battery Capacity	<b>Standard Cabinet</b> - Up to 28 Ah (Power Sonic PS-12280) <b>Deep Cabinet</b> - Up to 40 Ah (Power Sonic PS-12400)

### 2 to 16 LOOP (8 SLOT) ENCLOSURE

Size	<b>Standard Cabinet</b> - 540mm (W) x 720mm (H) x 160mm (D), or 21.3in (W) x 28.3in (H) x 6.3in (D) <b>Deep Cabinet</b> - 540mm (W) x 720mm (H) x 212mm (D), or 21.3in (W) x 28.3in (H) x 8.3in (D)
Construction	Mild sheet steel enclosure, 1.5 mm
Cable Entry	<b>Standard Cabinet</b> - 38 knockouts top, 25 knockouts back, 2 knockouts each side, 2 knockouts bottom <b>Deep Cabinet</b> - 50 knockouts top, 25 knockouts back, 2 knockouts each side, 2 knockouts bottom
Battery Capacity	<b>Standard Cabinet</b> - Up to 28 Ah (Power Sonic PS-12280) <b>Deep Cabinet</b> - Up to 40 Ah (Power Sonic PS-12400)

### ALL MODELS

Finish	Epoxy powder coated
Color	Enclosure  Red (RAL3002)  Gray (BS 00 A 05)  Black (RAL9005)  Fascia  Pantone 532 C
Power supply voltage	115 V AC or 230 V AC
Power supply rating at 24V DC	5.25 A (charges up to 60 Ah) 10.25 A (charges up to 100 Ah)
Display	Full-color 800 x 480 LCD with resistive touch screen and automatic backlight dimming
Software zones	2000
Software groups	5000
Cause and Effects	5000
Event log	10,000 events, 1 second resolution. Filterable and printable.
Detection loops	2 to 16 added 2 at a time (S758 dual loop cards)
Detection loop current	400 mA each
AUX 24V Output	2; each rated at 900 mA
NACs	4; each rated at 2.5 A. Class B or 2 Class A.
Programmable Relay Outputs	5; 30 V DC 1 Amp
Programmable Inputs	3; designed to be activated by voltage-free contacts
Network Connection	Optional network card provides communication for networking 127 fire control panels
NAC Synchronization	Internal Support of System Sensor, Wheelock, Gentex, and Amseco protocols
Printer (OPTIONAL)	40 column, front-loading thermal
Zone LED Indicators (OPTIONAL)	Up to 3 banks of 48 (144) as standard
Operating Temperature	23° F to 120° F ( -5° C to 49° C)
Operating Humidity	to 95% (non condensing)

## Optional Panel Peripherals

- **Dual Loop Panel Module (S758)**

The Dual Loop Panel Module monitors loop device status and provides status to the panel processor. It holds device configurations and operates in a standalone manner when catastrophic failures occur.

- **16 Channel I/O Interface Card (S560)**

The 16 Channel I/O Interface enhances the versatility of the alarm system by providing additional input and output capabilities to the Compas Fire Alarm Control Panel. Inputs or outputs can be selected for up to 16 individual channels, and are configured in the same way as devices connected to addressable loops of the panel. The 16 Channel I/O Interface can be configured to contribute or act upon cause and effect logic.

- **Media Gateway™ Panel Module (S788)**

The Media Gateway Panel Module provides connectivity to monitoring centers using IP (Sur-Gard), or dial-up connectivity. The Media Gateway may also be used to meet integration application requirements.

- **8 Channel Relay Panel Module (S791)**

The 8 Channel Relay Panel Module has 8 voltage-free changeover relay contacts, each of which can be individually programmed. All outputs are configurable in the same way as devices connected to the loops and all may be acted upon by cause and effect logic. These boards are typically used in applications which require more than the five standard relay outputs, such as signaling to other systems or plant control.

- **Network Module (S723)**

The Network Module provides enhanced high-speed communication for networking fire control panels. The network provided by this module can support combinations of Fire Alarm Control Panels and Vision units. Fire Alarm Control Panels can receive events from other panels in the network. The Class X networking used in conjunction with the Network Module provides tolerance against open and short circuit trouble conditions.

- **Printer (S768)**

The Printer is an optional feature for printing fire system events as they occur. The printer is located on the fascia, below the Zone LEDs (if present). It is a thermal printer and never requires replacement ink. Printing is performed on heat-sensitive paper rolls. A trouble message is reported when the paper runs out. The printer includes a front-loading feature for replacing paper rolls.

- **Zone LED Module (S771)**

The Zone LED module contains 48 LEDs and is connected to the LCD Main Processor Board of the Compas Fire Alarm Control Panel. A maximum of three Zone LED modules can be connected to provide the fascia with 144 Zone LED indicators.

- **4 Channel NAC Panel Module (S793)**

*FUTURE ENHANCEMENT*

Additional NAC output capability can be added to by using 4 Channel NAC Modules. These boards have 4 supervised NAC outputs, each of which can be individually programmed. The circuits can be configured for class A or B operation. These circuits can be configured to act upon cause and effect logic.

- **8 Channel Conventional Zone Panel Module (S792)**

*FUTURE ENHANCEMENT*

The 8 Channel Conventional Zone Panel Module has 8 supervised detection circuits (Class B). Each circuit can support up to 20 conventional detectors and approved devices. Individual circuits may be configured for trigger resistor or short circuit activation. These circuits may be used for any of the standard input actions and can be configured to contribute to cause and effect logic. Each pair of circuits (e.g., 1 and 2, 3 and 4, etc.) can be joined to form a single Class A configuration.

- **16 Channel I/O Interface Panel Module (S772)**

*FUTURE ENHANCEMENT*

The 16 Channel I/O Interface Panel Module will provide the same functionality as the 16 Channel I/O Interface Card, with the convenience of a plug-in module.

## Panel Model Numbers

CV 1 0 3 A# -14 (abcd)

If no peripheral cards are ordered, this portion of the model number should be omitted.

- OPTIONAL PERIPHERAL CARDS
- PRINTER, ZONE LEDs, & APERTURE
- CABINET COLOR
- LOOP MODULES & COMMUNICATION MODULES
- POWER SUPPLY
- LANGUAGE
- ENCLOSURE STYLE
- PRODUCT STYLE

Panel Options	Valid Entries	Description
Product Style	CV	Compas Fire Alarm Control Panel
	CR	Compas Network Vision Annunciator
Enclosure Style	1	4 Slot Standard Enclosure
	2	4 Slot Standard Plex-Door Enclosure
	3	4 Slot Deep Enclosure
	4	4 Slot Deep Plex-Door Enclosure
	5	4 Slot Extra Deep Guard Station Enclosure - FUTURE ENHANCEMENT
	6	4 Slot 19" Rack Mount Enclosure - FUTURE ENHANCEMENT
	7	8 Slot Standard Enclosure - 16 Loop
	8	8 Slot Standard Plex-Door Enclosure - 16 Loop
	9	8 Slot Deep Enclosure - 16 Loop
	A	8 Slot Deep Plex-Door Enclosure - 16 Loop
	C	Annunciator
Language	0	English
	1	Portuguese
	2	Spanish
	3	Taiwanese
Power Supply	0	None
	1	5.25 A 115V
	2	5.25 A 230V
	3	10.25 A (auto-voltage sensing)
Loop Modules & Communication Modules	00	Not Fitted
	NC	Network Module only (Network Vision Annunciator)
	A#	2-Loop Panel Module, Apollo Protocol
	L#	2-Loop Panel Module, Apollo Protocol, and Media Gateway
	M#	2-Loop Panel Module, Apollo Protocol, and Network Module
N#	2-Loop Panel Module, Apollo Protocol, Network Module, and Media Gateway	
Cabinet Color	1	● Red (RAL3002)
	4	● Gray (BS 00 A 05)
	6	● Black (RAL9005)
Printer, Zone LEDs & Aperture	0	No Printer / No Zone LEDs
	1	No Printer / No Zone LEDs, Blank 2nd Aperture
	3	Printer / No Zone LEDs
	4	Printer / 48 Zone LEDs
	5	No Printer / 48 Zone LEDs
	6	No Printer / 96 Zone LEDs
	7	No Printer / 144 Zone LEDs
Optional Peripheral Cards	a	16 Channel I/O Panel Module (S772) - FUTURE ENHANCEMENT
	b	8 Channel Relay Panel Module (S791)
	c	8 Channel Conventional Zone Module (S792) - FUTURE ENHANCEMENT
	d	4 Channel NAC Module (S793) - FUTURE ENHANCEMENT

ANALOG  
ADDRESSABLE

RELEASING

CONVENTIONAL

VOICEALERT

NOTIFICATION  
APPLIANCES

# L@titude Network Vision Annunciator

LRC00NC-10 (Red), LRC00NC-40 (Gray), and LRC00NC-60 (Black)



## Standard Features

- Full-color 7" (800 x 480 pixel) interface
- Replicates information displayed at the FACP
- Automatic display brightness adjustment
- Internal buzzer
- Connects via control panel network terminals
- Low current, 24V DC powered
- Configurable functionality
- Enable key-switch
- Sheet steel enclosure
- Surface or semi-flush enclosure options available

## Technical Specifications

Supply Voltage Range	21-30V DC
Quiescent Current during Power Failure	216mA typical (buzzer off @ 24V DC) 246mA typical (buzzer on @ 24V DC) 341mA max (buzzer on @ 21V DC)
Maximum Number of Units on a Network	31 Annunciators
Size	9.25" x 6.7" x 2.2" (235 mm x 170 mm x 55 mm)
Display	Full color 800 x 480 LCD with resistive touch screen and automatic back-light dimming
Construction	18 SWG, 1.2 mm mild sheet steel
Cable Entry	2 x 20 mm knockouts on top & bottom 4 x 20 mm and 2 x 28 mm knockouts in back
Vision Annunciator Electronics Only	S787
Finish	Epoxy powder coated
Color	Enclosure <input checked="" type="radio"/> Red (RAL3002) <input type="radio"/> Gray (BS 00 A 05) <input checked="" type="radio"/> Black (RAL9005)  Fascia <input type="radio"/> Signal White (RAL9003)
Optional Semi-Flush Mounting Collar Kit	KM1098RD - Red KM1098GY - Gray KM1098BS - Black
Weight	4.4 lbs (2 kg) maximum
IP Rating	IP30

## Product Overview

The L@titude Network Vision Annunciator is the most qualified annunciator on the market. It is a full-color graphical display and touchscreen. It represents the most versatile annunciator for life safety systems available today. The Annunciator is a full-function fire alarm repeater that is configurable and application-flexible for use in applications such as hospital nursing stations and elevator alarms.

L@titude Network Vision Annunciators can be configured to fully replicate fire control panel functionality, or to operate as simple, display-only devices for applications where access to fire alarm controls are inappropriate.



# Compas Network Vision Annunciator

CRC00NC-10 (Red), CRC00NC-40 (Gray), and CRC00NC-60 (Black)



## Standard Features

- Full-color 7" (800 x 480 pixel) interface
- Replicates information displayed at the FACP
- Automatic display brightness adjustment
- Internal buzzer
- Connects via control panel network terminals
- Low current, 24V DC powered
- Configurable functionality
- Enable key-switch
- Sheet steel enclosure
- Surface or semi-flush enclosure options available

## Technical Specifications

Supply Voltage Range	21-30V DC
Quiescent Current during Power Failure	216mA typical (buzzer off @ 24V DC) 246mA typical (buzzer on @ 24V DC) 341mA max (buzzer on @ 21V DC)
Maximum Number of Units on a Network	31 Annunciators
Size	9.25" x 6.7" x 2.2" (235 mm x 170 mm x 55 mm)
Display	Full color 800 x 480 LCD with resistive touch screen and automatic back-light dimming
Construction	18 SWG, 1.2 mm mild sheet steel
Cable Entry	2 x 20 mm knockouts on top & bottom 4 x 20 mm and 2 x 28 mm knockouts in back
Vision Annunciator Electronics Only	S787
Finish	Epoxy powder coated
Color	Enclosure <span style="color: red;">●</span> Red (RAL3002) <span style="color: gray;">●</span> Gray (BS 00 A 05) <span style="color: black;">●</span> Black (RAL9005)  Fascia <span style="color: black;">●</span> Pantone 532 C
Optional Semi-Flush Mounting Collar Kit	KM1098RD - Red KM1098GY - Gray KM1098BS - Black
Weight	4.4 lbs (2 kg) maximum
IP Rating	IP30

## Product Overview

The Compas Network Vision Annunciator is the most qualified annunciator on the market. It is a full-color graphical display and touchscreen. It represents the most versatile annunciator for life safety systems available today. The Annunciator is a full-function fire alarm repeater that is configurable and application-flexible for use in applications such as hospital nursing stations and elevator alarms.

Compas Network Vision Annunciators can be configured to fully replicate fire control panel functionality, or to operate as simple, display-only devices for applications where access to fire alarm controls are inappropriate.



# 16 Channel I/O Interface

S560 (Board) and S772 (Panel Module)



## Standard Features

- Simple 'plug-in' connection to the L@titude or Compas Fire Alarm Control Panel - FUTURE ENHANCEMENT
- Total of 16 channels per board
- Each channel configurable as input or output
- Up to 4 boards supported per 2-8 loop panel (maximum of 64 input/output channels)
- Up to 8 boards supported per 2-16 loop panel (maximum of 128 input/output channels)
- Inputs opto-isolated
- Outputs open collector transistor
- Inputs and outputs configurable as per field devices
- Full cause and effects on all inputs and outputs
- Decals provided to redesignate terminals

## Product Overview

The 16 Channel I/O Interface enhances the versatility of the alarm system by providing additional input and output capabilities to the L@titude or Compas Fire Alarm Control Panel. Inputs or outputs can be selected up to 16 individual channels. All inputs and outputs are configured in the same way as devices connected to addressable loops of the panel. The 16 Channel I/O Interface can be configured to contribute or act upon cause and effect logic.

Input points of this device are not supervised and therefore will not be used for life safety initiation within a UL listed system. In a UL application this module must be housed in the panel or a listed enclosure connected to the panel by metal conduit. Power must also be provided by a UL listed power supply.

## Technical Specifications

	Board (S560)	Panel Module (S772) - FUTURE ENHANCEMENT
Supply Voltage	24V DC	24V DC
Quiescent Current Consumption	20mA	20mA
Current per Input	3mA (maximum)	3mA
Current per Output	100 mA or 500 mA across bank of 8 outputs	100mA per output OR 400mA across bank of 8 outputs
Dimensions	7.5" H x 2.5" W	9.25" x 2.5" (234.6mm x 62.8mm)
Cable Capacity	2.5mm per terminal	2.5mm per terminal
Operating Temperature	2° F to 122° F ( 0° C to 50° C)	23° F to 120° F (-5° C to 49° C)
Operating Humidity	to 95% (non condensing)	to 95% (non condensing)

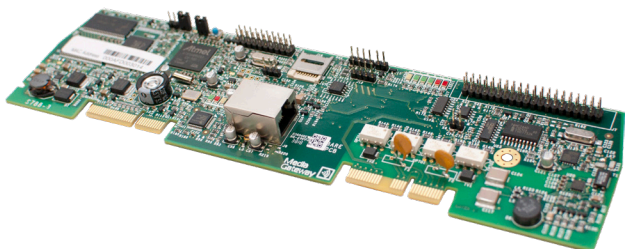
A small ancillary cabinet (see below to determine model number) is required for mounting the 16 Channel I/O Interface Board. The ancillary cabinet should be mounted near the panel. Provide a metal enclosed wiring pathway (such as conduit) between the panel and the cabinet.

**Cabinet w/ Lid and Mounting Plate:** VF0770-<A><B>, where A designates color (1 = red, 4 = gray) and B designates the number of cards (up to 3) to be installed.



# Media Gateway™ Panel Module

S788



## Technical Specifications

Supply Voltage Range	24V DC
Quiescent Current Consumption	114mA
Maximum Current Consumption	114mA
Dimensions	234.6mm x 62.8mm or 9¼" x 2½"
Operating Temperature	23° F to 120° F ( -5° C to 49° C)
Operating Humidity	to 95% (non condensing)

## Standard Features

- Simple 'plug-in' connection to the L@titude or Compas Fire Alarm Control Panel
- Dual Line Dialer Capability (SIA or Contact ID)
- IP Capable (Sur-Gard Fibro)
- Programmable to report via point or zone
- Programmable for back-up reporting
- Reporting codes can be customized by user

## Product Overview

The Media Gateway™ is a communication panel module for the Fire Alarm Control Panel.

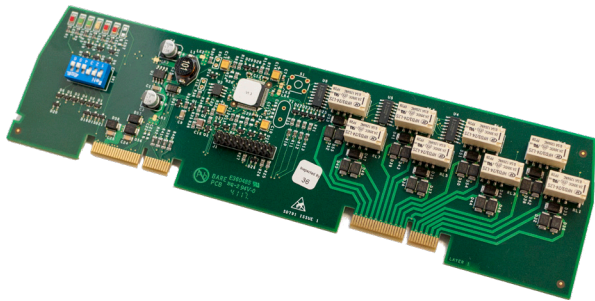
The Media Gateway Panel Module provides connectivity to a remote monitoring center via Sur-Gard Fibro or dial-up. SIA is the recommended format for usage, but Contact ID is also supported. Transmission can be made through one or two telephone lines, and/or IP through Ethernet. Standard reporting codes have been pre-defined, although the user may customize these codes through the Loop Explorer 2 programming application.

The Media Gateway can provide connectivity to third-party networks, and our new graphics system, L@tiView.



# 8 Channel Relay Panel Module

S791



## Standard Features

- Simple 'plug-in' connection to the L@titude or Compas Fire Alarm Control Panel
- 8 volt free changeover relay contacts (1 Amp 30V DC)
- Relay operated indications
- All outputs programmable for cause and effects
- Decals provided to redesignate terminals

## Technical Specifications

Supply Voltage Range	24V DC
Quiescent Current Consumption	10mA
Maximum Current Consumption	160mA (all relay on)
Output Contact Rating	30 VDC 1 Amp
Dimensions	9.25" x 2.5" (234.6mm x 62.8mm)
Cable Capacity	2.5mm per terminal
Operating Temperature	23° F to 120° F (-5° C to 49° C)
Operating Humidity	up to 95% (non condensing)

## Product Overview

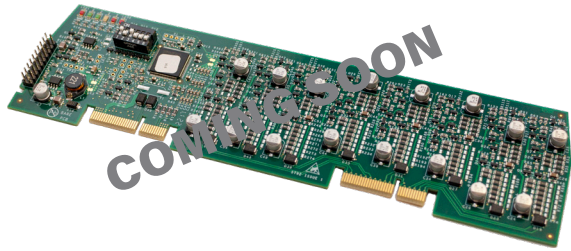
The 8 Channel Relay Panel Module has 8 voltage-free changeover relay contacts, each of which can be individually programmed. All outputs are configurable in the same way as devices connected to the loops and all may be acted upon by cause and effect logic. These boards are typically used in applications which require more than the five standard relay outputs, such as signaling to other systems or plant control.





# 8 Channel Conventional Zone Panel Module

S792



## Technical Specifications

Supply Voltage Range	24V DC
Quiescent Current Consumption	70mA
Maximum Current Consumption	950mA
Maximum Line Impedance	10.1 Ohms
Dimensions	234.6mm x 62.8mm or 9¼" x 2½"
Operating Temperature	23° F to 120° F ( -5° C to 49° C)
Operating Humidity	up to 95% (non-condensing)

## Standard Features

- Simple 'plug-in' connection to the L@titude or Compas Fire Alarm Control Panel
- 8 monitored, conventional, detection zone inputs
- Decals provided to redesignate terminals

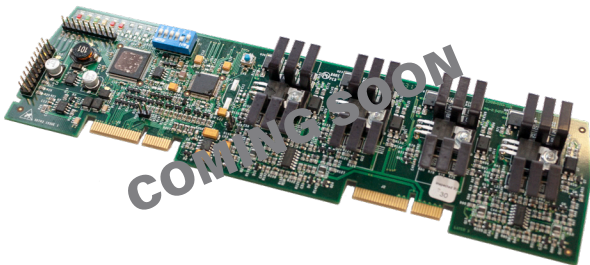
## Product Overview

The 8 Channel Conventional Zone Panel Module has 8 supervised detection circuits (Class B). Each circuit can support up to 20 conventional detectors and approved devices. Individual circuits may be configured for trigger resistor or short circuit activation. These circuits may be used for any of the standard input actions and can be configured to contribute to cause and effect logic. Each pair of circuits (e.g., 1 and 2, 3 and 4, etc.) can be joined to form a single Class A configuration.



# 4 Channel NAC Panel Module

S793



## Technical Specifications

Supply Voltage Range	21 to 30V DC
Quiescent Current Consumption	30mA
Maximum Current Consumption	50mA
Current per Output	2.5 A per channel
Maximum Line Impedance	4V loss (load-dependent)
Output Contact Rating	30 VDC 1 Amp
Dimensions	234.6mm x 62.8mm or 9¼" x 2½"
Cable Capacity	2.5mm per terminal
Operating Temperature	23° F to 120° F ( -5° C to 49° C)
Operating Humidity	up to 95% (non-condensing)

## Standard Features

- Simple 'plug-in' connection to the L@titude or Compas Fire Alarm Control Panel
- 4 NAC outputs
- Fault and operated LED on-board indicators
- Decals provided to redesignate terminals

## Product Overview

Additional NAC output capability can be added to by using 4 Channel NAC Modules. These boards have 4 supervised NAC outputs, each of which can be individually programmed. The circuits can be configured for class A or B operation. These circuits can be configured to act upon cause and effect logic.



# Elite RS

## Analog Addressable Fire Alarm Control Panels

VF0810-xx (1 Loop)

VF0820-xx (2 Loop)

where xx=10 for Red and xx=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.



## Technical Specifications

Construction	16AWG sheet steel
Dimensions	14.5" W x 18.9" H x 4.25" D
Weight (without batteries)	20lb
Finish (lid and box)	RAL3002 (Red) BS 00 A 05 (Gray)
Finish (product labels)	BS 00 A 05 (Gray)
AC Voltage Supply	115 or 230V AC 50 or 60 Hz (specify when ordering, default is 115V)
AC Supply Fuse	1.6A 250V
DC Power Supply Rating	24V 5.25 Amps
AUX 24V Supply	Fused at 500mA
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	2.3A each, max 3.1 A total
Detection Loop	250 milliamp output
Serial Expansion Port	Serial RS485
PC Port	Serial RS232
Network Connection	Optional network cards allow use of eNET
NAC Synchronization	Internal Support
NAC Protocols	System Sensor, Wheelock, Gentex, Amseco

## Optional 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 and 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)

## Elite Demo Case

VF1062-10 (Red)

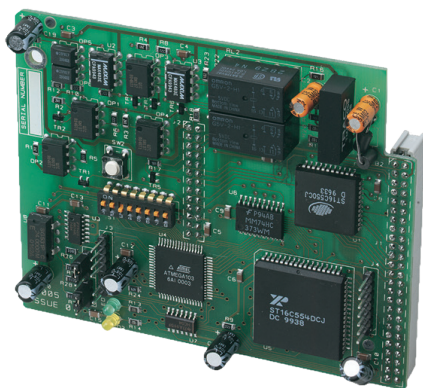
VF1062-40 (Gray)



- 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

# 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.

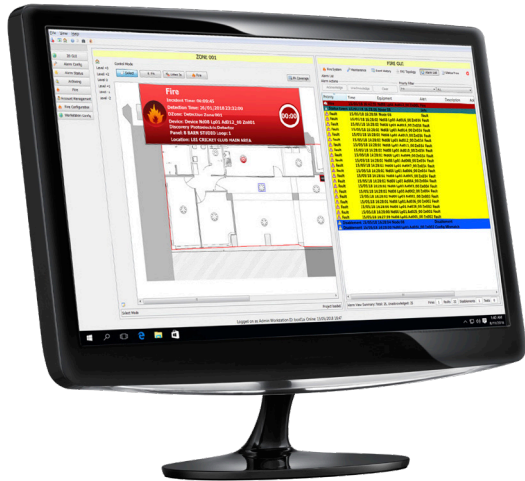
Two conductor loop wiring ensures network integrity by providing full isolation of faulty wiring segments.



## 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)
Cable Type	Belden 9271, Belden 9860, FP200 Gold
Compatible Panels	Elite / Elite RS (required for networking)





## Standard Features

- Supports dual screens
- Reports configuration mismatch errors
- Powerful event log filtering and reporting
- Manages the state of the fire system
- Programmable macro buttons to perform panel control operations
- Full map navigation
- Device analog value reporting
- Performs device and zone disablements/enablenents

## Ordering Codes

LEUS2004	L@tiView - Elite / FireNET 4 Panel License
LEUS2016	L@tiView - Elite / FireNET 16 Panel License
LEUS2064	L@tiView - Elite / FireNET 64 Panel License
LVUS2004	L@tiView - Compas / L@titude 4 Panel License
LVUS2016	L@tiView - Compas / L@titude 16 Panel License
LVUS2128	L@tiView - Compas / L@titude 128 Panel License

## Product Overview

L@tiView can automatically switch to the area on the site map where a fire has been activated to quickly view an event and begin immediate investigation. With L@tiView, operators and users are alerted to an event as soon as it occurs and are directed to the location of the event.

A Maintainer's area provides dedicated functions for a fire alarm system's maintenance team. A comprehensive list of all fire devices along with their statuses, cause and effect rules, and integration settings allows operators to quickly view a device, make changes, and disable devices all from one workstation. For all fire devices on the site, a Maintainer's log shows operators and engineers a view of all recorded maintenance activities, previous faults and status histories to help speed up maintenance procedures and device checks.

## Permissions

L@tiView enables permissions to be given to different levels of users. There are four default user accounts configured upon installation.

Additional accounts can be created by the administrator. These user accounts use default permissions groups, but user accounts and groups can be cloned and edited per site requirements. The default accounts are:

- **Operator** – Ordinary users of the system.
- **Manager** – Users who supervise the operators and as such have additional permissions and access. 2D GUI editing permitted.
- **Maintainer** – Users who maintain the system. Allows analog value polling, control of outputs, fire panel operations, fire zone testing and additional maintenance facilities.
- **Administrator** – Users who are permitted to administer the system. Full system access permitted.

# eVIEW

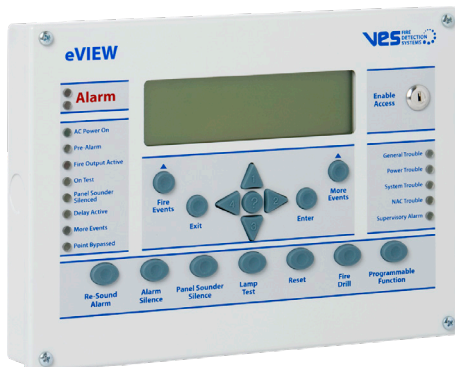
## Analog Addressable Serial Annunciator

### VF1172-xx

where xx=10 for Red and xx=40 for Gray



RED MODEL - 10



GRAY MODEL - 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.

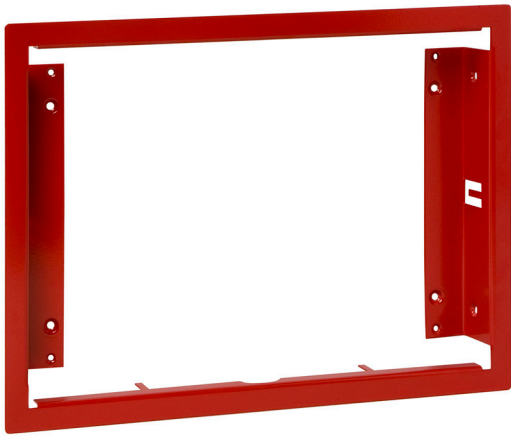
The large, graphic LCD and high brightness LED indicators duplicate the indications on the Elite fire alarm control panel at up to 15 additional locations via a simple, two-wire serial data connection.

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.





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.

### Trim Ring 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	Red (VF1173-10) or Gray (VF1173-40)

### 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) BS 00 A 05 (Gray)
24V Supply	21 to 30V DC
Maximum Ripple Current	200 millivolts
Quiescent Current of Panel in AC Fail	0.03 Amps
Serial Data Connection	2 core RS485 (Up to 3937 feet total cable length)
Maximum Terminal Capacity	12AWG

# Single / Double Action Addressable Pull Station



VF3001-10

VF3002-10

## 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. 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 (FRCM), 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 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 panel. When a change of status is sensed by the FRCM, it sends an interrupt to the control panel indicating that an alarm has occurred.

After addressing, pull stations are fully configurable through Loop Explorer programming software.

## Standard Features

- Single or Dual Action
- Wire head Connections
- Gold Plated Alarm Contacts
- Surface or Weatherproof Backbox
- Optional Auxiliary Alarm Contacts
- Optional Station Colors

## Application

Available in both single (VF3001) and dual action (VF3002) configurations, the 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 1A, 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, VF3007-10 interior surface metal backbox or VF3008-10 weatherproof interior surface metal backbox.

## Ordering Codes

VF3001-10	Single action addressable pull station
VF3001-10	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 key and one scored, acrylic breakrod.

## Technical Specifications

Rated Voltage CDP Powered Loop	17-41 VDC
Average Consumption	3.5 mA
Alarm Current	17-28 VDC
Transmission	DCP - Digital Communication Protocol
Maximum Humidity	90% non-condensing
UL Ambient Installation Temperature Range	32°F to 100°F
Operating Temperature Range	14°F to 122°F
Color	Red





# AMS Manual Pull Station



## 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

## Ordering Codes

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

## 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 will be VES addressable AMS series single or dual action models, VF3031-10, VF3032-10, or VF3029-10. Models will be made of 14 AWG CRS and painted with Red enamel. The words Fire Alarm will be in a contrasting color and be embossed text 1/2" tall. The electronics will 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 will be Underwriters Laboratories Inc. Listed and be installed within the limits defined in the Americans With Disabilities Act.

## Technical Specifications

Operating Voltage	17-41 VDC
Average Consumption	550 $\mu$ A (typical) 660 $\mu$ A (standard)
Ambient Temperature	32°F to 120°F
Maximum Humidity	90% non-condensing
Dimensions	3.4"W x 4.8"H x 2.0"D
Mounting	Single gang or 4" square electrical box



# Fixed Temp / Rate of Rise Heat Sensor

VF2010-00



## 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.

## Ordering Codes

VF2010-00	Fixed Temp / Rate of Rise Heat Sensor
VF7001-00	4" Mounting Base
VF7002-00	6" Mounting Base
VF7008-00	6" Sounder Base
VF7005-00	6" Low Frequency Sounder Base

## Technical Specifications

Operating Voltage	17-41 VDC
Standby Current	350 mA
Alarm Current	500 mA
Transmission Method	DCP—Digital Communication Protocol
Maximum Humidity	up to 95% non-condensing
UL Temperature Range	135° F to 190° F
Operating Temperature Range	32° F to 190° F
Rate of Rise	15° F Minimum
Color and Case Material	Bone / White - ABS Blend
Weight	3.2 oz, (4.9 oz with 4" base)

## 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.



## 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.

## 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 will furnish and install, where indicated on the plans, Fixed Temp / Rate of Rise Automatic heat sensors.

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

It will be possible for the control panel to perform a functional test of the sensor without heat. The test method will 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.

# Photoelectric Smoke Sensor

VF2011-00



## 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.

## Ordering Codes

VF2011-00	Photoelectric Smoke Detector
VF7001-00	4" Mounting Base
VF7002-00	6" Mounting Base
VF7008-00	6" Sounder Base
VF7005-00	6" Low Frequency Sounder Base

## 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.



## 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.

## Engineering Specification

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

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

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

## Bases

The VF7001 and 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	450 mA
Alarm Current	540 mA
Transmission Method	DCP—Digital Communication Protocol
Maximum Humidity	up to 95% 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 and Case Material	Bone / White - ABS Blend
Weight	3.4 oz (5.1 oz with 4" base)

# Multi-Criteria Sensor - Smoke & Heat

VF2012-00



## 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.

## Ordering Codes

VF2012-00	Multi-Criteria Sensor
VF7001-00	4" Mounting Base
VF7002-00	6" Mounting Base
VF7008-00	6" Sounder Base
VF7005-00	6" Low Frequency Sounder Base

## 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 pre-set 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.



## 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. This unique design allows fast response to flaming fires as well as smoldering fires while minimizing false alarms.

## Engineering Specification

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

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

## Bases

The VF7001 and 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	450 $\mu$ A
Alarm Current	540 $\mu$ A
Transmission Method	DCP—Digital Communication Protocol
Maximum Humidity	up to 95% 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 and Case Material	Bone / White - ABS Blend
Weight	4.2 oz (5.9 oz with 4" base)

# Multi-Criteria Sensor - CO, COHb, Smoke, Heat

VF2014-00



## 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 LEDs provide visual alarm / power indications
- Non-directional smoke chamber
- Pre-Alarm Function
- 10 year life span on CO sensor

## Ordering Codes

VF2014-00	Multi-Criteria Sensor
VF7001-00	4" Mounting Base
VF7002-00	6" Mounting Base
VF7005-00	6" Low Frequency Sounder Base

## 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 pre-set 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 requirements.

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





## 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 CO.

The sensors unique design allows fast response to flaming/smoldering fires and carbon monoxide levels while minimizing nuisance alarms.

## Engineering Specification

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

The Sensor and Base will be UL listed as compatible with the fire alarm control panel.

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

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

## Technical Specifications

Operating Voltage	17-41 VDC
Standby Current	600 $\mu$ A
Alarm Current	30 mA max
Transmission Method	DCP—Digital Communication Protocol
Maximum Humidity	up to 95% 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 and Case Material	Bone / White - ABS Blend
Weight	4.2 oz

# 6" Analog Low Frequency Sounder Base

VF7005-00



## 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 3 and 4 patterns
- High sound pressure level (85dB SPL at 10 feet)
- Support for Temporal 4 when used with VF2014 CO detector

## Operation

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

## Technical Specifications

Operating Voltage	17-41 VDC
SLC Loop Idle Current	154 $\mu$ A
SLC Loop Max Alarm Current	154 $\mu$ A
Device Auxiliary Power Minimum Voltage	16-31 VDC
Auxiliary Idle Current	2.8 mA
Auxiliary Current Consumption (Alarm)	72 mA @ 33VDC 95 mA @ 24VDC 140 mA @ 16VDC
Auxiliary Current Consumption (Alarm) FWR	92 mA @ 33VFWR 149 mA @ 24VFWR 203 mA @ 16VFWR
Maximum Humidity	up to 93%, non-condensing
UL Ambient Installation Temperature Range	32° F to 100° F
Operating Temperature Range	32° F to 122° F
Sound Pressure Level	85 dB @ 10'
Color and Case Material	Bone PC / ABS Blend
Maximum Quantity Per Loop	127
Dimensions	6.6" (Diameter), 3.1" (Height)

## Optional Trim Ring

For installations that extend beyond the mounting surface or do not have sufficient mounting box depth, an optional trim ring is available. Insert the VF7005 into the trim ring prior to mounting to the electrical box.



OPTIONAL TRIM RING  
VF7006



# 6" Analog Sounder Base

VF7008-00



## 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)

## Number of Bases Permitted

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

NOTE SLC maximum resistance is 50 ohms.

## Operation

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

## Technical Specifications

Operating Voltage	17-41 VDC
SLC Loop Idle Current	110 $\mu$ A
SLC Loop Max Alarm Current	110 $\mu$ A
Device Aux Power Minimum Voltage	16-31 VDC
Auxiliary Idle Current	2.8 mA
Maximum Humidity	up to 93%, non-condensing
UL Ambient Installation Temperature Range	32° F to 100° F
Operating Temperature Range	14° F to 122° F
Sound Pressure Level	85 dB @ 10'
Color and Case Material	Bone PC / ABS Blend
Weight	0.455 lb
Dimensions	5.9" (Diameter), 1.3" (Height)



# Analog Duct Sensors

VF5013-00 and VF5014-00 (With Relays)



## Technical Specifications

Operating Voltage	17-41 VDC
Average Current	<b>VF5013-00</b> 2mA
Consumption (on S-SC Line)	<b>VF5014-00</b> 10mA <b>NOTE</b> Aux power required for the VF5014-00
Contacts	<b>VF5013-00</b> N/A <b>VF5014-00</b> 2 Independently Controlled
Alarm Current	<b>VF5013-00</b> 8mA <b>VF5014-00</b> 55mA
Operating Temperature Range	32° F to 120° F
Relative Humidity	10-85%, non-condensing
Contact Rating	1A @ 30V DC 0.5A @ 125V AC
Air Velocity	300 to 4,000 ft/min
Sampling Tubes	3' (VF5003-00) 5' (VF5004-00) 10' (VF5005-00)
Remote Indication	<b>VF5013-00</b> Alarm <b>VF5014-00</b> Alarm, Pilot

## 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

## Operation

The VF5013 and VF5014 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 VF5014 contains 2 sets of form "C" contacts rated at 10 amps. The pilot and alarm visual indicators, provided on the front of the VF5014 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.



# 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.



## 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)	278db @ 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		●		●			●	
VF5039-00	●	●		●			●	
VF5038-00	●		●				●	
VF5037-00	●		●	●			●	
VF5023-00		●			●		●	
VF5036-00	●	●			●		●	
VF5035-00	●		●		●		●	
VF5034-00		●					●	
VF5033-00			●				●	
VF5032-00	●	●				●	●	
VF5022-00	●	●			●	●		●
VF5031-00	●	●	●		●	●		●
VF5030-00						●	●	

# Fast Response Contact Modules

VF6002-00 and VF6013-00



## 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

## Technical Specifications

Operating Voltage DCP Powered Loop	17-41 VDC
Average Current Consumption	550 $\mu$ A (typical)
Alarm Current	30 mA
Maximum Humidity	up to 90%, non-condensing
UL Ambient Installation Temperature Range	32° F to 120° F
Dimensions	<b>VF6002</b> 4.2" W x 4.7" H x 1.4" D <b>VF6013</b> 2.8" W x 1.8" H x 0.7" D

## 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.



## 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 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.

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.

# Fast Response Contact Modules (Class A Wiring)

VF6020-00 and VF6021-00 (with Short Circuit Isolator)



## 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.

## Technical Specifications

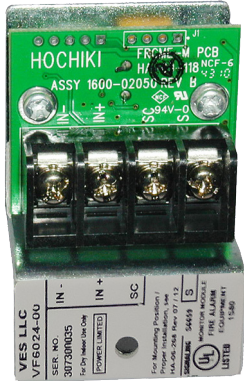
Supply Voltage Nominal	25.3-39 VDC
Average Current Consumption	630 $\mu$ A (typical), 6.3 mA (Alarm)
SCI on Resistance	40 ohm Max (normal condition)
SCI Fault Detection Threshold	12 Volts (typical)
SCI Isolation Current (Short Circuit Condition)	10 mA (typical)
Maximum Quantity per Loop	127
Mounting	4" Square Electrical Box
Maximum Humidity	up to 90%, non-condensing
UL Ambient Installation Temperature Range	32° F to 120° F
Dimensions	4.2" W x 4.7" H x 1.4" D





# Fast Response Contact Modules

VF6024-00



## 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

## Technical Specifications

Supply Voltage (S-SC)	25.3-39 VDC
Average Current Consumption	339 $\mu$ A (typical) 358 mA (Alarm)
Programmable Input	1 Monitoring Input
EOL Device	10K Ohms Resistor
Maximum Quantity per Loop	127
Mounting	2" Electrical Box
Maximum Humidity	up to 90%, non-condensing
UL Ambient Installation Temperature Range	32° F to 120° F
Dimensions	1.75" W x 2.37" H x 0.5" D

## 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.



# Supervised Output Module

VF6004-00



VF6004

## Technical Specifications

Operating Voltage	17-41 VDC
Average Current Consumption	220 $\mu$ A 300 $\mu$ A
Auxiliary Supply Voltage Nominal	18-30 V
Current Consumption on Auxiliary Power Lines	18-30 V
Mounting	4" Square Electrical Box
Maximum Humidity	up to 90%, non-condensing
UL Ambient Installation Temperature Range	32° F to 120° F
Dimensions	4.2" W x 4.7" H x 1.4" D

## 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.

## 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.



# Supervised Output Modules (Class A Wiring)

VF6040-00 and VF6041-00 (with Short Circuit Isolator)



VF6040

VF6041

## Technical Specifications

Supply Voltage Nominal	25.3-39 VDC
Auxiliary Supply Voltage	24 VDC
Average Current Consumption	<b>VF6040</b> 420 $\mu$ A (Typical) <b>VF6041</b> 220 $\mu$ A (Typical) <b>On S-SC Line</b> Maximum 6mA (Alarm)
Current Consumption on Auxiliary Power Lines	50 $\mu$ A (typical)
SCI on Resistance	40 ohm max (normal condition)
SCI Fault Detection Threshold	12 Volts (typical)
SCI Isolation Current (short circuit condition)	10mA (typical)
Maximum Quantity per Loop	127
Mounting	4" Square Electrical Box
Maximum Humidity	up to 90%, non-condensing
UL Ambient Installation Temperature Range	32° F to 120° F
Dimensions	4.2" W x 4.7" H x 1.4" D

## 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 and 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 and -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 and -AI modules do the rest based upon the custom configuration. Each DCP-SOM-A and -AI provides a single Class B or Class A circuit rated for 2.0 Amps @ 24 VDC. Each DCP-SOM-A and -AI also requires a 24 VDC power source in addition to the SLC.



# Dual Relay Modules

VF6052-00 (Low Voltage), VF6053-00 (Low Voltage w/ Isolator),  
VF6054-00 (High Voltage), VF6055-00 (High Voltage w/ Isolator)



VF6052

VF6053

## Technical Specifications

Supply Voltage Nominal	25.3-39 VDC
Average Current Consumption	350 $\mu$ A (typical) 405 $\mu$ A (alarm)
Contacts	2 Independently Controlled Form C <b>VF6052/VF6053</b> 2A @ 30 VDC/ 0.5A @ 115 VAC <b>VF6054/VF6055</b> 8A @ 30 VDC/ 4.8A @ 250 VAC
SCI on Resistance	40 ohm max (normal condition)
SCI Fault Detection Threshold	12 Volts (typical)
SCI Isolation Current (Short Circuit Condition)	10 mA (typical)
Maximum Quantity per Loop	127
Mounting	4" Square Electrical Box
Maximum Humidity	up to 90%, non-condensing
UL Ambient Installation Temperature Range	32° F to 120° F
Dimensions	4.2" W x 4.7" H x 1.4" D

## Standard Features

- Provides two independently configurable Form C contacts per address
- Contacts are rated as follow:
  - VF6052/ VF6053: 2A @ 30 VDC / 0.5A @ 115 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 and 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.



# Dual Input Monitor Module

VF6007-00



VF6007

## Technical Specifications

Operating Voltage	17-41 VDC
Average Current Consumption	600 $\mu$ A (Typical)
Alarm Current	30 mA
Maximum Quantity per Loop	127
Mounting	4" Square Electrical Box
Maximum Humidity	up to 90%, non-condensing
UL Ambient Installation Temperature Range	32° F to 120° F
Dimensions	4.2" W x 4.7" H x 1.4" D

## 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.



# Conventional Zone Module

VF6011-00



VF6011

## 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

## Technical Specifications

Operating Voltage	17-41 VDC
Average Current Consumption (S, SC)	400 $\mu$ A (typical)
Auxiliary Supply Voltage Nominal	18.8-27.2 V
2 Wire Detector Loop Current Standby Det. Load	1mA
Data Transmission Current Temp. Range	22mA $\pm$ 20%
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
End-of-Line Device	4.7K Ohms
Mounting	4" Square Electrical Box
Maximum Humidity	up to 90%, non-condensing
UL Ambient Installation Temperature Range	32° F to 120° F
Dimensions	4.2" W x 4.7" H x 1.4" D

## 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.



# Handheld Programmer

VF9000-00



## Technical Specifications

Rated Voltage 9 VDC

Battery 9 VDC

Weight 0.34 lbs

Length 6 1/4"

Color White

## 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 Cannot find device after power up

E3 Invalid sensor response

E4 Cannot 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 blue 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 / Blue 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.

# Elite XT

## Releasing Fire Control Panels



### Ordering Codes

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

### 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

### 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.



Manufactured by Kentec Electronics Ltd.  
Dartford, DA11 9JQ, United Kingdom



## Technical Specifications

AC Supply	115 V or 230 V
AC Supply Fuse	3.15 Amp (F3.15A L250V)
Finish	Epoxy powder coated
Color	Red (optional gray)
Power Supply Rating	3 Amps total including battery charge 28V +/- 2V
Maximum Ripple Voltage	200 millivolts
Battery Type	Two 12 Volt 7Ah sealed lead acid in series
Battery Charge Voltage	27.6VDC nominal (temperature-compensated)
Battery Charge Current	0.7A maximum
Battery Fuse	20mm, 3.15A glass Sloblow
Maximum Current Draw from Batteries	3 Amps
Quiescent Current of Panel in Power Failure	0.095A
AUX 24V Output	Fused at 500mA with electronic fuse
NAC Outputs	24V Fused at 500mA with electronic fuse
Trouble Relay Contact Rating	30VDC 1A Amp maximum
Fire Relay Contact Rating	30VDC 1A Amp maximum
Local Fire Relay Contact Rating	30VDC 1A Amp maximum
First Stage Contact Rating	30VDC 1A Amp maximum
Second Stage Contact Rating	30VDC 1A Amp maximum
Extract Contact Rating	30VDC 1A Amp maximum
Zone Quiescent Current	2mA maximum
Terminal Capacity	12 AWG
Number of detectors per zone	Dependent on type (maximum 32)
Detection circuit end of line	6K8 5% ½ Watt resistor
Supervised input end of line	6K8 5% ½ Watt resistor
Extinguishant output EOL	1N4004 Diode
Number of detection circuits	3
Number of sounder circuits	2 x 1st Stage, 1 x 2nd Stage
Extinguishant release output	Rated at 1 Amp
Extinguishant release delay	Adjustable 0 - 60 seconds (in 5 second steps)
Extinguishant release duration	Adjustable 60 - 300 seconds (in 5 second steps)
Normal Zone Impedance (EOL)	6.8K
Detector Alarm Impedance	470 Ohm
Pull Station Alarm Impedance	270 Ohm
Short circuit threshold	Short circuit Impedance 99 Ohms
Supervised Inputs Normal Impedance (EOL)	6.8K
Supervised Inputs Alarm Impedance	470 Ohm
Supervised inputs Short circuit threshold	99 Ohms
Status unit/Ancillary board connection	Two wire RS485 connection
Status unit power output	Rated at 500mA with electronic fuse

# XT+ | Multi-Area Addressable Releasing Control Units

**NOTE** This unit must be connected to an Elite RS panel.



## Standard Features

- UL 864 10th Edition Listed
- Up to 2 releasing areas / hazards per XT+ unit
- Dual releasing outputs for each area (configurable as Main/Reserve)
- First and second stage NAC outputs for each area
- First and second stage volt free changeover relays for each area
- Released volt-free relay per area
- Trouble volt-free relay per area
- Programmable releasing delays
- Programmable output duration
- Countdown indicator shows time until release in seconds
- Mode select and manual release controls per area
- Monitored remote manual release input
- Monitored remote abort input
- Monitored remote mode select input
- Monitored remote released pressure switch input
- Serial connections for status units and ancillary boards

## Releasing Module Cabinets

VF0891-10	1 Area, Red
VF0891-40	1 Area, Gray
VF0892-10	2 Area, Red
VF0892-40	2 Area, Gray

All cabinets are equipped with a 5.25A Power Supply.

## Product Overview

XT+ control panels are multi-area releasing control modules complying with UL 864 10th Edition.

Up to 15 releasing modules may be connected to a master fire alarm control panel. Each releasing module can accommodate a separate hazard defined by two specific zone.

Each XT+ unit is equipped with a 5.25 A power supply (115 VAC or 230 VAC) to power releasing modules and attached solenoids / actuators.

Each releasing area has a comprehensive set of inputs and outputs and is configurable via a simple programming interface. All releasing areas may have up to 7 serially-connected status indication and control units or ancillary relay boards.



## TECHNICAL SPECIFICATIONS

Construction	1.2mm mild sheet steel
IP Rating	IP30
Finish	Epoxy powder coated
Color	<b>Lid &amp; Box</b> Gray - BS 00 A 05 Red - RAL 3002 <b>Fascia</b> RAL7016
Weight	17.6 lbs (Standard Configuration)
Cabling	FP200 or equivalent (max capacitance 1uF max inductance 1 mH)
Power Supply	1.83 Amps Max @ 115 V, 50/60 Hz 0.915 Amps Max @ 230 V, 50/60 Hz
Power Supply Fuse	3A
Power Supply Rating	1 and 2 Area Units: Regulated 24V DC @ 4A
Maximum Ripple Current	1V Maximum
Battery Charge Voltage	27.6VDC nominal (temperature compensated)
Battery Fuse	10A 3AG
Current Draw in Power Fail Condition	54mA per releasing module
Max Current Draw from Batteries	4A
Ground Fault Impedance Value	100 Ohms
Temperature Range	32°F (0°C) - 120°F (49°C)
Relative Humidity	up to 93%, non-condensing
Releasing Delay	Adjustable 0 to 60 seconds (+/- 10%)
Releasing Duration	Adjustable 60 to 300 seconds

## TOP TERMINALS

24V Power	24V Regulated, continuous (power input)
Aux 24V	24V Regulated @ 850mA Max, Power-limited
Trouble	Volt-free contact rated at 30V DC, 1A, Resistive
1st Stage	Volt-free contact rated at 30V DC, 1A, Resistive
2nd Stage	Volt-free contact rated at 30V DC, 1A, Resistive
3rd Stage (Released)	Volt-free contact rated at 30V DC, 1A, Resistive
Supv. / Abort	Volt-free contact rated at 30V DC, 1A, Resistive
Extract	Volt-free contact rated at 30V DC, 1A, Resistive
3rd Stage Alarm	24V Regulated @ 850mA Max, Power-limited
2nd Stage Alarm	24V Regulated @ 850mA Max, Power-limited
Exting. 1 (Main)	24V Regulated @ 1A Max, Power-limited
Exting. 2 (Reserve)	24V Regulated @ 1A Max, Power-limited

## BOTTOM TERMINALS

Man. Rel	Class B
Abort	Supervised for opens, shorts, and grounds
Disable	End-of-Line device: 6.8K Ohm resistor (S2027)
Mode	Activation device: 470 Ohm resistor (S2051)
Rel P. Sw	Maximum Voltage / Current: 24V DC / 50 mA
Low Press.	Maximum Wiring Impedance for Each Circuit: 50 Ohms Power-limited
CIE Serial	Two wire, RS485 connection, Data 3.3 V, current-limited, Class B, supervised
Status Serial	Two wire, RS485 connection, Data 3.3 V, current-limited, Class B, supervised
Status Pow.	24V Regulated @ 850mA Max, Power-limited

# Releasing System Peripherals

Elite Status Indicators, Ancillary PCB, Elite Abort Switch, Disablement Switch



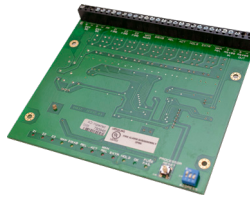
**Elite Status Indicators**  
VF1821-13



**Elite Abort Switch**  
VF1823-10



**Disablement Switch**  
VF1832-10



**Ancillary PCB**  
VF1890-00

## Standard Features

### Elite Status Indicators

- 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

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

### Disablement Switch

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

## Ordering Codes

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 w/ mode select keyswitch surface mount - red
VF1821-43	6 lamp status indicator w/ mode select keyswitch surface mount - gray
VF1821-14	6 lamp status indicator w/ mode select keyswitch flush mount - red
VF1821-44	6 lamp status indicator w/ 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	Disablement Switch (red/ gray)



## Product Overview

### Elite Status Indicators

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

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

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.

#### Ancillary PCB Technical Specifications

Size	6.1" (W) x 5.35" (H)
Size with Box	15.1" (W) x 12.2" (H) x 3.54" (D)
Construction (Boxed)	18 AWG mild steel
Supply Voltage	20-30 VDC
Contact Ratings	30V DC 1 Amp
Cable Capacity	12 AWG
Operating Temperature	22° F to 122° F
Operating Humidity	up to 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

#### 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
Maximum 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)

# 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 or 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)

## Ordering Codes

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

## 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.



## 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
AC 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 mA
Detection Zone EOL Resistor	6k8 5%
NAC EOL Resistor	10k 5%
Cable Capacity	14 AWG
Operating Temperature	23° F to 122° F
Operating Humidity	up to 95%, non-condensing

# Elite CP Annunciator



## 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)

## Ordering Codes

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

## 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 LEDs.

## 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	40 mA max @ 24 VDC
Standby Current	14 mA max @ 24 VDC
Maximum Number of Units	Maximum of 7 Annunciators on the AUX 24V output and the RS-485 Serial Bus
Connector Terminals	14-24 AWG
RS-485 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	up to 93%, non-condensing





# Fixed Temperature Heat Detector

VF2020-00 and VF2021-00



## 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, 35 $\mu$ A nominal
- Two built-in power/alarm LEDs for 360° viewing
- Fully electronic operation
- Power/alarm LEDs 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	40 $\mu$ A @ 24V DC	
Surge Current	160 $\mu$ A max. @ 24V DC	
Alarm Current	150mA max. @ 24V DC	
Contact Rating N/O Contacts	150mA max. @ 24 V	
Ambient Temperature	32° F to 120° F	
Color and Case Material	Bone PC / ABS Blend	

## Operation

The VF2020 and 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 LEDs for 360° indication of status. In standby condition the power LEDs flash Green. In an alarm condition the LEDs latch on Red. The VF2020 and 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 LEDs on.

## Application

The VF2020 and 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 and VF2021 heat detectors.

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



# Conventional Photoelectric Smoke Detector

VF2042-00, VF2043-00, and VF2044-00



## Ordering Codes

VF2042-00	Photoelectric / Heat Smoke Detector - Ivory Color
VF2043-00	Photoelectric / Heat Smoke Detector - White Color
VF2044-00	Photoelectric / Heat Smoke Detector without magnetic test feature - Ivory Color
VF2050-00	4" Mounting Base
VF2051-00	6" Mounting Base

## Operation

The VF2042, 43, and 44 photoelectric smoke detector(s) utilizes one bi-colored LED for indication of status. In a normal standby condition the LED flash Green every 3 seconds. When the detector senses that its sensitivity has drifted outside the UL listed sensitivity window the LED will flash Red every 3 seconds. When the detector senses smoke and goes into alarm the status LED 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.

Fire Judgment signals are processed and compared to a reference level, and when five 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 light continuously during the alarm period.

## Standard Features

- UL Listed
- Computer-designed non-directional smoke chamber
- 360° view of detector status LED
- Low profile, 2" high (with base)
- 2 wire base compatibility.
- Highly stable operation, RF/Transient protection
- Low standby current, 59 $\mu$ A at 24VDC
- One built-in power/sensitivity supervision/alarm LED
- Automatic Sensitivity window verification function meets outlined requirements in NFPA 72, Chapter 2 and 7, Inspection, Testing and Maintenance

**NOTE** Bases are not included with detectors, please order separately.



## Application

The VF2042, 43, and 44 are a reliable, high quality Photoelectric Smoke Detector(s). These detectors can be used in all application areas where Photoelectric Smoke Detectors are required. The computer-designed smoke chamber makes the VF2042, 43, and 44 well suited for detecting smoldering fires as well as fast-flaming fires.

VF2050-00 and VF2051-00 bases may be used with the VF2042, 43, and 44.

## Engineering Specification

The contractor will furnish and install where indicated on the plans, VES Fire Detection Systems Model VF2042, VF2043, and VF2044 photoelectric smoke detectors. The combination detector head and twist-lock base will be UL listed compatible with a UL listed fire alarm panel. The base will permit direct interchange with VES Fire Detection Systems VF2042, VF2043, and VF2044 photoelectric smoke detector. The base will be appropriate twist-lock base NS-4 Series, NS-6 Series, HSC-4R, or HSC-R. In the event of partial or complete retrofit, the VF2042, VF2043, and VF2044 maybe used in conjunction with, or as a replacement for, VES Fire Detection Systems detectors (VF5026 and the VF2041) on most VF2050 and VF2051 base applications.

The smoke detector will 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 will be capable of being measured. The sensitivity of the detector will be monitored automatically and continuously to verify that it is operating within the listed sensitivity range.

To facilitate installation, the detector will be non-polarized. Voltage and RF transient suppression techniques will be employed to minimize false alarm potential.

## Technical Specifications

Rated Voltage	12 or 24V DC
Working Voltage	8 - 35V DC
Maximum Voltage	42V DC
Light Source	GaAIAs infrared Emitting Diode
Standby Current	59 $\mu$ A @ 24V DC
Surge Current	160 $\mu$ A max. @ 24V DC
Alarm Current	150mA max. @ 24V DC
Air Velocity Range	0 - 4000 fpm
Ambient Temperature	32° F to 120° F
Color and Case Material	Bone PC / ABS Blend
Sensitivity Test Feature	Automatic Sensitivity window verification test

## Sensitivity Test Feature

The VF2042, VF2043, and VF2044 Photoelectric Smoke Detector has a built-in automatic sensitivity test feature.

1. In normal condition, both LEDs flash green.
2. When the sensitivity drifts outside of its sensitivity limits, both LEDs flash red.
3. In the alarm state both LEDs are red continuously.
4. When the sensitivity drifts outside of its sensitivity limits and both LEDs flash red, the device needs to be cleaned or returned to the factory for cleaning or calibration.

# 4" and 6" Conventional Base

VF2050-00 and VF2051-00



VF2050-00



VF2051-00

## 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
- Current limiting resistor
- Latching annunciator output
- Latching circuit
- Alarm LED

## Operation

The VF2050 and 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 and 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.

## Technical Specifications

Alarm Current	93mA (136mA @ 33V max.)
SLC Loop Idle Current	110 $\mu$ A
Compatibility Identifier	HB-3



# Conventional Manual Pull Stations



## Standard Features

- Single or Dual Action
- Enclosed switch with glass rod (included)
- 10 Amps @ 115 VAC Snap Action Switch
- Made in USA

## Product Overview

Conventional Manual Pull Stations are available in a number of configurations supporting Fire Alarm & Fire Suppression Systems. Each model is constructed of a solid die cast housing and comes in glossy red. The back switch plate is plated steel. The electrical switch is rated for 10 Amps @ 120 VDC normally open contact rating. Most models are connected via terminal block connections.

## Engineer Specifications

The Dealer will furnish and install where indicated on the plan, VES Non-Coded Manual Pull Station, VES part number; [VF30XX-CC] depending on customer or specifier requirements.

### Ordering Codes

VF3045-10	Fire Suppression Release - Red SPST
VF3045-16	Fire Suppression Release - Red DPST
VF3045-50	Fire Suppression Release - Yellow SPST
VF3045-56	Fire Suppression Release - Yellow DPST
VF3046-10	Single Action, Red, Hex Key SPST
VF3046-16	Single Action, Red, Hex Key DPST
VF3048-10	Single Action, Red, Cat 30 Key SPST
VF3048-16	Single Action, Red, Cat 30 Key DPST
VF3049-10	Dual Action, Red, Hex Key SPST
VF3049-16	Dual Action, Red, Hex Key DPST
VF3051-10	Dual Action, Red, Cat 30 Key SPST
VF3051-16	Dual Action, Red, Cat 30 Key DPST
VF3052-10	Single Action, Weatherproof, Red, Hex Key SPST, Pig Tails
VF3053-10	Single Action, Weatherproof, Red, Cat 30 Key, SPST
VF3053-16	Single Action, Weatherproof, Red, Cat 30 Key, DPST
VF3054-16	Single Action, Explosion Proof, Red, Hex Key, DPST

### Technical Specifications

Contact Rating	10 A @ 115 VAC
UL Ambient Installation Temperature Range	30°F to 150°F



# VoiceAlert (Master and Distributed Panel)

VF97XX-X0 (Master Panel) and VF97XX-X0 (Distributed Panel)



VF9700  
Master Panel

## Standard Features

- True Multiplex 6 Channel Distributed Audio
- Integrated Fire Phone, Area of Rescue, and Fan and 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 Mic Control
- 16 Switch Control Points
- Dual-channel DMR
- High-speed Communication Loop

### Distributed Panel(s)\* (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.



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.

## 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

## VF97XX Distributed Panel



### VF9512 - Telephone Jack

- Brushed Stainless Steel
- Single Gang Plate



### VF9511 - Portable Handset

- Color - Red
- 6 mount in VF9510 cabinet



### VF9510 - Telephone Cabinet

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



### VF9514 - Fire Phone Station

- Coil Cord / Thumb Turn Latch
- Available in Red or Gray
- Size: 12 3/4" H x 7 1/4" x 3 3/4" D
- Surface / Semi-Flush Mount

### VF9524 - Warden Station

- Armored Cable / Thumb Turn Latch
- Available in Red or Gray
- Size: 12 3/4" H x 7 1/4" x 3 3/4" D
- Surface / Semi-Flush Mount

# Wall Mount Horn, Horn / Strobes

VF4000-X0 (Low Profile Evacuation Horn), VF4001-X0 (Low Profile Evacuation Strobe),  
VF4002-X0 (Low Profile Evacuation Horn / Strobe)



## VF4000/ VF4001/VF4002 Product Strobe Current Ratings

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

## 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
- 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
- Tamper-proof 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

## Operation

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 syncable 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 <sup>1</sup>	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

<sup>1</sup>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.

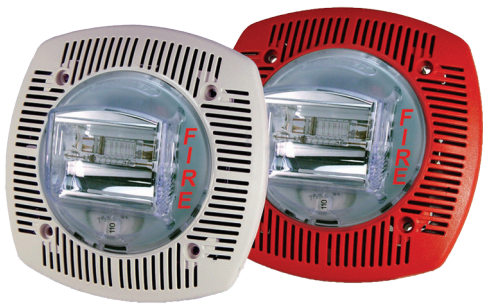
Horn Mode	Minimum dBA @ 10ft. per UL464 (HIGH)	Reverberant dBA @ 10ft per UL464 (LOW)	Regulated 24VDC Max. Operating @ High Setting (mA)
Temp 3 2400Hz	78	71*	28
Temp 3 Mechanical	76	70*	25
Temp 3 Chime	70*	66*	15
Continuous 2400Hz	81	74*	28
Continuous Mechanical	80	72*	25
Continuous Chime	70*	66*	15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

**NOTE** 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.

# Wall Mount Speaker / Strobes

VF4022-X0 (Low Profile Selectable Candela Speaker / Strobe) and  
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 Voltage<sup>1</sup>
- 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, FACPs 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.

## Ordering Codes

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

**NOTE** 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.



# Ceiling Mount Speaker / Strobes

VF4020-X0 (Low Profile Speaker) and 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 Voltage<sup>1</sup>
- Faceplate available in Red or Off-White

## Product Overview

The 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.

## Ordering Codes

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

**NOTE** The VF4020 and 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.





## Hochiki America Corporation

Buena Park, CA  
+1 714-522-2246  
<http://www.hochikiamerica.com/>  
[sales@hochiki.com](mailto:sales@hochiki.com)

## Hochiki America Corporation

King of Prussia, PA  
+1-800-270-3066  
<http://www.ves-network.com/>  
[info@ves-network.com](mailto:info@ves-network.com)

## Hochiki de México

Cuernavaca, Morelos  
+52 777 326 3855  
[exportsales@hochiki.com](mailto:exportsales@hochiki.com)

## Hochiki Europe (U.K.) Limited

Gillingham, Kent  
+44 (0)1634 260133  
<http://www.hochikieurope.com/>  
[info@hochikieurope.com](mailto:info@hochikieurope.com)

## Hochiki Latin America

Bogota, Colombia  
+57 310 318 9203  
[exportsales@hochiki.com](mailto:exportsales@hochiki.com)

## Hochiki Middle East FZE

Dubai, UAE  
+971 4372 4130  
<http://www.hochiki.ae>  
[sales@hochiki.ae](mailto:sales@hochiki.ae)

## Hochiki Italia SRL a s.u.

Verona, Italy  
+39 045 574028  
<http://www.hochiki.it/>  
[info@hochiki.it](mailto:info@hochiki.it)

## Hochiki Europe India

Haryana, India  
+91 (0)124-4777930  
<http://www.hochiki.in/>  
[info@hochiki.in](mailto:info@hochiki.in)

## Hochiki Australia Pty Ltd

Regents Park, NSW  
+61 2 9738 5566  
<http://www.hochikiaustralia.com/>  
[sales@hochikiaustralia.com](mailto:sales@hochikiaustralia.com)

## Hochiki Asia Pacific

Singapore  
+65 6841 9728  
<http://www.hochikisingapore.com/>  
[hochiki@singnet.com.sg](mailto:hochiki@singnet.com.sg)

## Hochiki Thailand Co.,Ltd

Khet Wattana, Bangkok  
+66-2-664-4445  
<http://www.hochikisingapore.com/>  
[hochiki@singnet.com.sg](mailto:hochiki@singnet.com.sg)

## Hochiki Jakarta

Tanah Abang, Jakarta Pusat  
+62-21-29183812  
<http://www.hochikisingapore.com/>  
[hochiki@singnet.com.sg](mailto:hochiki@singnet.com.sg)

## Hochiki Ho Chi Minh

Ho Chi Minh City, Vietnam  
+84 2838 221 208  
<http://www.hochikisingapore.com/>  
[hochiki@singnet.com.sg](mailto:hochiki@singnet.com.sg)

## Hochiki Taiwan

Taipei, Taiwan  
+886-2-2521-9690  
<http://www.hochiki.com.tw/>  
[htro@hochiki.com.tw](mailto:htro@hochiki.com.tw)

## RCL (Master Dealer for the Middle East Region)

Dbayeh, Lebanon  
+961 4 543 567  
<http://www.rclint.com>  
[mbounader@rclint.com](mailto:mbounader@rclint.com)