

Technology that saves lives

Submittal Guide

## VS Series

Intelligent fire alarm solutions up to 1,000 addressable points







#### Technology that saves lives

Project:	
Contact:	
Date:	

Thank you for giving us the opportunity to provide this submittal for an VS Series Life Safety System. VS Series combines analog addressable detection with technologically advanced sensor diagnostic capabilities. Together these innovations offer unsurpassed stability, reliability, and flexibility.

This guide provides a summary of these innovations and includes a comprehensive presentation of related system components and devices. Products we are submitting for your consideration are indicated by a checkmark in the margins of the pages that follow.

More detailed information can be found in individual data sheets dedicated to each product. All these sheets, along with guide specifications and other useful product information, are available electronically at www.kidde-esfire.com.

Thank you for giving us the opportunity to provide this submittal. Please do not hesitate to contact us should you require further information.

Submittal Guide

# VS Series

Intelligent fire alarm solutions up to 1,000 addressable points



#### VS Series Submittal Guide

Intelligent fire alarm solutions for small buildings

Kidde is a registered mark in the United States and other countries. ©2021 Carrier. All Rights Reserved.

Email: kidde-fire@carrier.com; Web: kidde-esfire.com
8985 Town Center Pkwy, Bradenton, FL 34202

K85005-0132

Wiring diagrams provided herein are for information and reference only and are not to be used for installation purposes. Consult the appropriate installation documents for wiring and configuration details.

This guidebook is for information only and is not intended as a substitute for verbatim legislated requirements. For authoritative specifications regarding the application of life safety, security, and access control systems, consult current editions of applicable codes and standards. For authoritative interpretation of those codes and standards, consult your local authority having jurisdiction.

While every effort has been made to ensure the accuracy and completeness of this guidebook, the authors and publishers assume no responsibility for errors, inaccuracies, omissions, or any inconsistencies herein.

Genesis Series, and Signature Series are trademarks of Carrier.



40

### Cohesive, comprehensive analog addressable fire alarm for small buildings.

With control panels, devices, and accessories all engineered to work in unison, VS Series systems provide reliable performance and the advanced features you need for successful installation and worry-free operation. Best of all, VS Series leaves you in control – not hemmed in by a limited product line. Kidde's extensive range of fire alarm products gives you the freedom to tailor each system to the particular needs of the building – and the budget of the building owner – while a robust feature set leaves plenty of room for upgrades, expansions, and retrofits long into the future.

But innovative features tell only part of the story: when you specify VS Series you're getting more than outstanding value in a fire alarm panel; you're benefitting from a whole family of control, detection, and notification appliances finely tuned to work together – engineered and tested to function as a single unified system.

Built on the successes of the past, and meeting the needs of the future, VS Series is the changing face of small building fire detection today.

VS Series Analog	1
Specifications	2
Control Panels	4
Network Options	5
Option Cards	7
Control, Display & Annunciation	8
Power Supplies	10
Accessories	12
Intelligent Initiating Devices	13
Optical and Combination Detectors	14
Fire/CO Detectors	15
Detector Bases	16
Duct Detectors	17
Input/Output Modules	18
Manual Pull Stations	22
Notification Appliances	23
Notification Appliances  LED Compact Strobes, Horns & Horn-strobes	
	25
LED Compact Strobes, Horns & Horn-strobes	25 26
LED Compact Strobes, Horns & Horn-strobes	25 26 27
LED Compact Strobes, Horns & Horn-strobes  LED Wall Strobes, Horns & Horn-Strobes  LED Ceiling Strobes, Horns, Horn-Strobes	25 26 27
LED Compact Strobes, Horns & Horn-strobes  LED Wall Strobes, Horns & Horn-Strobes  LED Ceiling Strobes, Horns, Horn-Strobes  LED Wall Speakers & Speaker-Strobes	25 26 27 28
LED Compact Strobes, Horns & Horn-strobes  LED Wall Strobes, Horns & Horn-Strobes  LED Ceiling Strobes, Horns, Horn-Strobes  LED Wall Speakers & Speaker-Strobes  LED Ceiling Speakers, Horns & Strobes	25 26 27 28 29
LED Compact Strobes, Horns & Horn-strobes  LED Wall Strobes, Horns & Horn-Strobes  LED Ceiling Strobes, Horns, Horn-Strobes  LED Wall Speakers & Speaker-Strobes  LED Ceiling Speakers, Horns & Strobes  Low Frequency Horns and Horn-Strobes	25 26 27 28 29 30
LED Compact Strobes, Horns & Horn-strobes  LED Wall Strobes, Horns & Horn-Strobes  LED Ceiling Strobes, Horns, Horn-Strobes  LED Wall Speakers & Speaker-Strobes  LED Ceiling Speakers, Horns & Strobes  Low Frequency Horns and Horn-Strobes  Outdoor Horns & Strobes	25 26 27 28 29 30 31
LED Compact Strobes, Horns & Horn-strobes  LED Wall Strobes, Horns & Horn-Strobes  LED Ceiling Strobes, Horns, Horn-Strobes  LED Wall Speakers & Speaker-Strobes  LED Ceiling Speakers, Horns & Strobes  Low Frequency Horns and Horn-Strobes  Outdoor Horns & Strobes  Outdoor Speakers & Strobes	25 26 27 28 29 30 31 32
LED Compact Strobes, Horns & Horn-strobes  LED Wall Strobes, Horns & Horn-Strobes  LED Ceiling Strobes, Horns, Horn-Strobes  LED Wall Speakers & Speaker-Strobes  LED Ceiling Speakers, Horns & Strobes  Low Frequency Horns and Horn-Strobes  Outdoor Horns & Strobes  Outdoor Speakers & Strobes  Firefighters' Telephones	25 26 27 28 29 30 31 32 32
LED Compact Strobes, Horns & Horn-strobes  LED Wall Strobes, Horns & Horn-Strobes  LED Ceiling Strobes, Horns, Horn-Strobes  LED Wall Speakers & Speaker-Strobes  LED Ceiling Speakers, Horns & Strobes  Low Frequency Horns and Horn-Strobes  Outdoor Horns & Strobes  Outdoor Speakers & Strobes  Firefighters' Telephones  Harsh Environment Signals	25 26 27 28 29 30 31 32 33 34
LED Compact Strobes, Horns & Horn-strobes  LED Wall Strobes, Horns & Horn-Strobes  LED Ceiling Strobes, Horns, Horn-Strobes  LED Wall Speakers & Speaker-Strobes  LED Ceiling Speakers, Horns & Strobes  Low Frequency Horns and Horn-Strobes  Outdoor Horns & Strobes  Outdoor Speakers & Strobes  Firefighters' Telephones  Harsh Environment Signals  Audible Signals	25 26 27 28 29 30 31 32 33 34
LED Compact Strobes, Horns & Horn-strobes  LED Wall Strobes, Horns & Horn-Strobes  LED Ceiling Strobes, Horns, Horn-Strobes  LED Wall Speakers & Speaker-Strobes  LED Ceiling Speakers, Horns & Strobes  Low Frequency Horns and Horn-Strobes  Outdoor Horns & Strobes  Outdoor Speakers & Strobes  Firefighters' Telephones  Harsh Environment Signals  Audible Signals  Accessories	25 26 27 28 29 30 31 32 33 34 35 36
LED Compact Strobes, Horns & Horn-strobes  LED Wall Strobes, Horns & Horn-Strobes  LED Ceiling Strobes, Horns, Horn-Strobes  LED Wall Speakers & Speaker-Strobes  LED Ceiling Speakers, Horns & Strobes  Low Frequency Horns and Horn-Strobes  Outdoor Horns & Strobes  Outdoor Speakers & Strobes  Firefighters' Telephones  Harsh Environment Signals  Audible Signals  Accessories  Hazardous Location Devices	25 26 27 28 30 31 32 33 34 35 36

Door Holders & Relays

Door Holders......40

Relays .......40

SPDT Relays ......41

- Specifications p. 2
- Control Panels p. 3
- Option Cards p. 4
- Power Supplies p. 6
- Remote annunciation p. 8
  - Accessories p. 10

### VS Series Analog Control

VS Series life safety systems are a powerful intelligent solution for small to mid-sized buildings. Advanced analog technology delivers the benefits of flexible system installation, while a clean and easy-to-operatate user interface makes panel operation and system maintenance quick and intuitive.

#### The smart choice

VS Series electronic device addressing eliminates the tedium of setting dipswitches, and innovative programming features allow the system designer to customize powerful built-in features to precisely suit the needs of the building owner.

#### Flexibility built right in

Two fully-programmable front panel switch/LED combinations provide an added measure of flexibility. Their slide-in labels take the mystery out of custom applications, and present a clean finished appearance.

#### Perfect for retrofits

VS Series is particularly well-suited to retrofit applications. All connections are made over standard wiring – no shielded cable required. This means that in most situations existing wiring can be used to upgrade a legacy control panel to VS Series technology without the expense or disruption of rewiring the entire building.

#### Signals with a difference

VS Series NACs are configurable to fully support the advanced signaling technology of Kidde Genesis and Enhanced Integrity notification appliances. These devices offer precision synchronization of strobes to UL 1971 standards. For Genesis devices, enabling this feature allows connected horns to be silenced while strobes on the same two-wire circuit continue to flash until the panel is reset.

#### Clear-cut remote annunciation

Remote annunciation is a strong suit of VS Series. Up to eight annunciators can be installed on a single system. Compatible annunciators include a range of LED and LCD models that provide zone or point annunciation, as well as common control capabilities.

VS Series also supports graphic annunciation with optional RA Graphic Annunciator interface modules. Each interface provides common control, indicators, and 32 LEDS.

#### A complete line of accessories

VS Series life safety systems are supported by a complete line of intelligent detectors, modules and related equipment, each of which is fully tuned and tested to operate in concert with one another to provide highly reliable service and years of trouble-free operation.



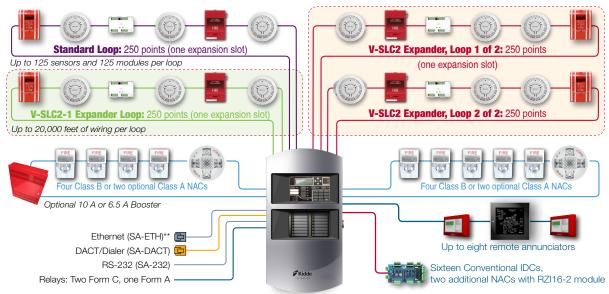


#### Analog Control

#### System Layout

VS4





Each VS4 panel has room for up to two device loop controller modules in any combination of single or dual 250-device loops. VS4 comes with one loop that supports up to 125 detectors and 125 modules.

\*\*SA-ETH supports: (1) remote connectivity for diagnostics & programming, (2) Central station monitoring to Sur-Gard IP Receivers.



Each VS1 panel ships with one device loop controller that supports 64 devices of any type. This panel's device capacity cannot be expanded.

Specifications	VS1	VS4
Device loops	loop Class B or Class A (Styles 4, 6, 7) supporting     up to 64 device addresses     (any combination of detectors and modules).         Maximum T-taps: 63         (each device can be on its own branch)	1 loop, expandable to 4, Class A or B (Styles 4, 6, 7), each loop supporting up to 250 device addresses (125 detectors and 125 modules max.). Addresses 1 to 125 are for detectors and addresses 126 to 250 are for modules Maximum T-taps/loop: 124
Notification appliance circuits	2 Class B (Style Y), Class A (Style Z) optional 3.75 A FWR total at 120/230 VAC 60 Hz 3.0 A FWR total at 230 VAC 50 Hz 2.5 A FWR each max. per circuit	4 Class B (Style Y) or 2 Class A (Style Z) 6.0 A FWR total at 120/230 VAC 60 Hz 5.0 A FWR total at 230 VAC 50 Hz 2.5 A FWR each max. per circuit
Primary power	120 VAC, 60 Hz, 1.3 A. 230 VAC, 50-60 Hz, 0.62 A max.	120 VAC, 60 Hz, 2.0 A. 230 VAC, 50-60 Hz, 0.97 A max.
Base panel current standby	155 mA	172 mA
Base panel current alarm	204 mA	267 mA
Input zones	16 max.	32 max.
Remote annunciator	8 drops max., RS-485 Class B, Class A is optional Data line length: 4,000 ft. (1,219 m)	8 drops max., RS-485 Class A or B Data line length: 4,000 ft. (1,219 m)
Operating voltage	24 VD	C panel

See Data Sheet K85005-0135 for complete specification and ordering information.



Analog Control

### **Control Panels**

#### Standard Features

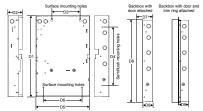
The attractive appearance of VS Series control panels means they won't be a blemish on an expensive architectural design. Their gently curved door fronts offer a distinctive flair with available red or silver finishes. Controls are discreetly inset behind a striking black bezel.

- Auto-programming speeds installation time
- Supports VS Series analog addressable modules and detectors
- Form C contacts for alarm and trouble, Form A for supervisory
- Supports GSA-REL Releasing Module
- Electronic addressing with automatic device mapping
- Optional Ethernet port for diagnostics, programming and a variety of system reports
- Two programmable switches with LEDs and custom labeling
- Supports Genesis horn silence over two wires and UL 1971-compliant strobe synchronization
- Supports up to eight serial annunciators, (LCD, LED-only, and graphic interface).
- Can use existing wiring for most retrofit applications
- Upload/download remotely or locally

# Kidde VS1



#### Dimensions



	D1*	D2	D3	D4	D5*	D6	D7	D8	D9
VS1	21.50	3.85	7.5	15.5	14.25	10.25	3.9	21.7	2.7
VOI	(54.6)	(9.8)	(19)	(39.4)	(36.2)	(26)	(9.9)	(55.1)	(6.8)
VS4	28.0	3.85	9.0	22.0	15.75	10.25	3.9	28.2	2.7
V 34	(71.1)	(9.8)	(22.8)	(55.8)	(40.0)	(26.0)	(9.9)	(71.6)	(6.8)

#### VS4 Intelligent Single Loop Systems, Data Sheet K85005-0135

TO I mitomigorit	omgie zeep eyeteme, zata eneet recesse e rec
VS4-G	Four loop system with one 250-point loop installed. 110v, gray door.
VS4-G-2	Four loop system with one 250-point loop installed. 230v, gray door.
VS4-G-2-PG	Four loop system with one 250-point loop installed. 230v, gray door, Portuguese
VS4-G-2-SP	Four loop system with one 250-point loop installed. 230v, gray door, Spanish.
VS4-GC	Four loop system, one 250-point loop installed. 110v, gray door, LED strips, Canada.
VS4-GD	Four loop system, one 250-point loop installed. 110v, gray door, with dialer.
VS4-GF	Four loop system, one 250-point loop. 110v, gray door, LED strips, French Canada.
VS4-R	Four loop system with one 250-point loop installed. 110v, red door.
VS4-R-2	Four loop system with one 250-point loop installed. 230v, red door.
VS4-G-PG	Four loop system with one 250-point loop installed. 110v, gray door, Portuguese.
VS4-G-SP	Four loop system with one 250-point loop installed. 110v, gray door, Spanish.
VS4-RD	Four loop system, one 250-point loop installed. 110v, red door, with dialer.
SA-TRIM2	VS4 Flush mount trim, black.

#### VS1 Intelligent Multi-Loop Systems, Data Sheet K85005-0135

VS1 Intelligent	Multi-Loop Systems, Data Sheet K85005-0135
VS1-G	One loop system with one 64-point loop installed. 110v, gray door.
VS1-G-2	One loop system with one 64-point loop installed. 230v, gray door.
VS1-G-2-PG	One loop system with one 64-point loop installed. 230v, gray door, Portuguese.
VS1-G-2-SP	One loop system with one 64-point loop installed. 230v, gray door, Spanish.
VS1-GD	One loop system, one 64-point loop installed. 110v, gray door, with dialer.
VS1-GL	One loop system, one 64-point loop installed. 110v, gray door, English Canada.
VS1-GL-F	One loop system, one 64-point loop installed. 110v, gray door, French Canada.
VS1-R	One loop system with one 64-point loop installed. 110v, red door.
VS1-R-2	One loop system with one 64-point loop installed. 230v, red door.
VS1-RD	One loop system, one 64-point loop installed. 110v, red door, with dialer.
SA-TRIM1	VS1 Flush mount trim, black





### **Option Cards**

VS Series panels are supported by a complete line of modules and related equipment that enhance performance and extend system capabilities. Option cards are easy to install and set up. They simply plug directly into the control panel main circuit board or are connected to it with a ribbon cable. After installation, terminals remain easily accessible for quick connection of field wiring. The cabinet provides ample room for wire routing, keeping wiring neat and easy to service at all times.



SA-CLA Class A Module

V-SLC2 Loop Expander Card

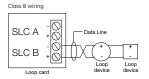


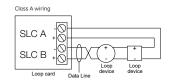
RZI16-2 Remote Zone Interface



#### V-SLC2 Loop Expander Cards

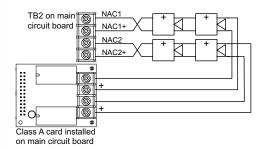
V-SLC2 Loop Expander Cards provide additional device loops on the VS4 control panel. The V-SLC1-1 provides one loop with 250 additional addresses, and the V-SLC1-2 provides two loops totalling an additional 500 device addresses. The card accommodates Class B or Class A wiring. It is compatible with VS4 control panels only. The loop expander card connects to connector J7 on the main circuit board.





V-SLC2-1 Loop Expansion Module. Adds one loop to VS4 systems, 250 device addresses. Mounts in cabinet.

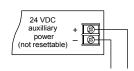
V-SLC2-2 Loop Expansion Module. Adds two loops to VS4 systems, 500 device addresses. Mounts in cabinet.



#### **SA-CLA Class A Module**

The SA-CLA card provides Class A capability for NAC and annunciator wiring. Its terminal block provides the wiring connection for NAC return wiring. The card is required for annunciator Class A wiring even though this wiring does not return to the SA-CLA card. The SA-CLA is compatible with VS1 control panels only. VS4 panels are Class A ready. The SA-CLA is installed directly to the control panel circuit board using its plastic standoffs and plug connection.

SA-CLA VS1 Class A adapter module. Provides Class A capacity on NACs. Mounts in cabinet on main board.



#### **SMK Smoke Power Converter**

The SMK Smoke Power Converter Module provides a backup power source for two-wire smoke circuits connected to a Signature data circuit. The SMK monitors the operating power from the power supply. When power begins to degrade, the SMK provides the necessary operating voltage to the two-wire smoke detection circuits.

SMK

Smoke Power Converter Module



#### Analog Control

#### SUBMIT





#### SA-ETH Ethernet Interface Card

The SA-ETH card provides a standard 10/100 Base-T Ethernet network connection for connecting to an intranet, a local network, or the Internet. The card can be used to upload and download panel configuration, history, and current status from the VS-CU to the panel over the network.

Further, the SA-ETH can be used for central station monitoring service to transmit system status changes (events) when connected to compatible Sur-Gard IP receivers. The SA-ETH has been enhanced with the addition of the Sur-Gard FIBRO protocol, and it can be configured in the configuration utility.

The Ethernet card is installed on the plastic assembly and connects to the main circuit board via a ribbon cable.

SA-ETH

Ethernet Port, Slave, for Ethernet connection to local area networks. Mounts in cabinet on base plate.



#### SA-232 RS-232 interface

The SA-232 card provides an RS-232 interface with VS Series panels. It can be used for connecting a printer to the control panel to print system events. The card also can be used for connecting a computer to download a configuration program from the VS-CU to the control panel.

The RS-232 card is installed on the plastic assembly and connects to the main circuit board via a ribbon cable.

SA-232

Serial Port (RS-232), for printers & computers, mounts in cabinet to base plate



#### **SA-DACT Dialer**

The SA-DACT provides communications between the control panel and the central station over a telephone line system. It transmits system status changes (events) to a compatible digital alarm communicator receiver over the public switched telephone network. The dialer is capable of single, dual, or split reporting of events to two different account and telephone numbers. The modem feature of the SA-DACT can also be used for uploading and downloading panel configuration, history, and current status to a PC running the VS-CU.

The dialer phone lines connect to connectors on the dialer's main circuit board. Phone line 1 connects to connector J4 and phone line 2 connects to connector J1.

SA-DACT

Dual Line Dialer/Modem, supports Contact ID, mounts in cabinet on base plate

#### **Remote Zone Interface**

The RZI16-2 Addressable Remote Zone Interface Module is an addressable device that provides connections for sixteen Class B Initiating Device Circuits and two Class B Supervised Output Circuits. The inputs and outputs can be configured individually for several device types. It requires 18 consecutive addresses on the Signaling Line Circuit (SLC). Addresses are assigned electronically. There are no address switches to set. The RZI16-2 incorporates two 8-segment DIP switches that are used to select the Alarm or

Supervisory default device type for each of the 16 IDC circuits. The module also includes one 4-segment DIP switch used to select the default Relay or NAC output device type. Device types other than the default are accomplished through programming.







### **Option Cards**



#### The SA-USB Interface Card

The SA-USB Interface Card provides a USB connection to a supported printer or a connection to a PC. The card can be used for connecting a printer to the control panel to print system events. The card can also be used for uploading and downloading panel configuration, history, and current status to a PC running the configuration utility (CU).

SA-USB

USB interface card for connection to printers and laptops running configuration utility, mounts in cabinet to base plate



#### **BMS Communications Bridge**

The Building Management System (BMS) communications bridge is an ancillary device that provides protocol translation between the VS1 or VS4 control panel serial data and the serial or Ethernet input of an external device controller. Signal flow is typically one way, from the life safety panel to the network to the building automation system. The SA-FSB supports Modbus RTU and BACnet MSTP protocols.

SA-FSB

**Building Management System Interface** 

### **Power Supplies**



SUBMIT



#### **Remote Booster Power Supply**

The Remote Booster Power Supply is a self-contained 24 Vdc power supply designed to augment fire alarm audible and visual power requirements as well as provide power for auxiliary, access control and security applications. The booster contains all of the necessary circuits to monitor and charge batteries, control and supervise four Class B or two Class A NAC circuits and monitor two controlling inputs from external sources.

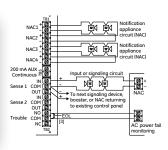
Simple switch selection provides a wide variety of operational configurations. Each remote booster power supply is supplied with its own enclosure providing ample space for additional interface modules and battery compartment.

When used with Genesis Notification appliances, the booster provides the ability to synchronize strobes as well as horn signals. The booster flexibility allows synchronization with upstream devices, or, the booster may be used to synchronize downstream devices, as well as other boosters and their connected devices.

MIRBPS notification appliance circuits easily configure for either of two signaling rates: 3-3-3 temporal or continuous. This makes the MIRBPS ideal for applications requiring signaling rates not available from the main panel. It also allows independent setup of a notification appliance circuit without interfering with the main panel and its initiating circuits. In addition to the generated signal rates, the MIRBPS can also be configured to follow the signal rate of the main panel's notification appliance circuit. This allows seamless expansion of existing NACs.

For comprehensive configuration and wiring details, refer to the MIRBPS Application Guide, 85001-0582.

MIRBPS6A	6.5 Amp Booster Power Supply	Data Sheet K85005-0125
MIRBPS6A/230	6.5 Amp Booster Power Supply (220V)	Data Sheet K85005-0125
MIRBPS10A	10 Amp Booster Power Supply	Data Sheet K85005-0125
MIRBPS10A/230	10 Amp Booster Power Supply (220V)	Data Sheet K85005-0125
3-TAMP	Tamper switch	Data Sheet K85005-0125



#### **Auxiliary Power Supply (APS)**

The Auxiliary Power Supply (APS) is a self-contained 24 Vdc power supply designed to augment fire alarm audible and visual power requirements as well as provide auxiliary power for life safety and security applications. The APS contains all of the necessary circuits to monitor and charge batteries, control and supervise four Class B or two Class A NAC circuits and monitor two controlling inputs from external sources.

APS6A	6.5 Amp Auxiliary Power Supply	Data Sheet K85005-0127
	, , , , , , , , , , , , , , , , , , , ,	
APS6A/230	6.5 Amp Auxiliary Power Supply (220V)	Data Sheet K85005-0127
APS10A	10 Amp Auxiliary Power Supply	Data Sheet K85005-0127
APS10A/230	10 Amp Auxiliary Power Supply (220V)	Data Sheet K85005-0127

#### **Batteries and Battery Cabinets**

Batteries and	Dattery Cabinet	•			
12 Volt Batteries	□12V4A (4.5 Ah)	□12V6A5 (7.2 Ah)	□12V10A (11 Ah)	Data Sheet K85005-0127	П
	□12V24A (26 Ah)	□12V17A (18 Ah)		Data Sheet K85005-0127	
6 Volt Batteries	□6V8A (8 Ah)	□6V10A (12 Ah)		Data Sheet K85005-0127	
Battery Cabinet	□BC-1 (holds up to	two 40 Ah batteries)		Data Sheet K85005-0127	



**Remote annunciation** 

Kidde R-Series Annunciators are high-performance remote annunciators that provide status indication and common controls for compatible fire alarm control panels, including VS Series small analog fire alarm systems. This family of annunciators offers LCD or LED annunciation. Models are available with and without common controls, in red or white.











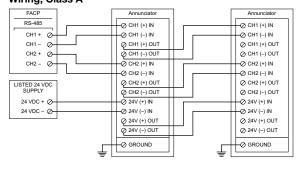
There are three R-Series annunciator models, plus an LED-based expander. Up to two expanders can be connected to any annunciator. The expander includes 24 pairs of LEDs that extend the capabilities of any of the annunciators.

All annunciator models include status LEDs and an internal buzzer. Two models have an LCD text display, and one has 16 pairs of LEDs for zone annunciation. LCD models feature a large back-lit, four by twenty character per line, super-twist liquid crystal display.

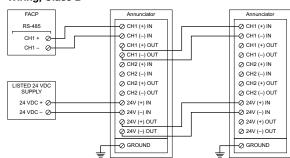
R-Series annunciators and expanders are mounted on a standard 4-inch square electrical box, using the included mounting ring. They can also be surface mounted in locking steel enclosures. Three different enclosures are available.

A keyswitch and graphic annunciator interface is available for R-Series annunciator applications. The keyswitch enables or disables common controls. The graphic annunciator interface cards supports 32 LEDs and 16 switches on the graphic panel display.

#### Wiring, Class A



#### Wiring, Class B



#### LCD Annunciators

K-RLCD	LCD text annunciator without common controls. English.	Data Sheet K85005-0128
K-RLCD-R	LCD text annunciator without common controls. English. Red.	Data Sheet K85005-0128
K-RLCD-C	LCD text annunciator with common controls. English.	Data Sheet K85005-0128
K-RLCD-CR	LCD text annunciator with common controls. English. Red.	Data Sheet K85005-0128

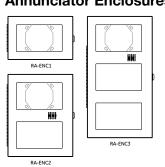
#### **LED Annunciators**

K-RLED-CR	16-pair LED zone annunciator with common controls. English. Red.	Data Sheet K85005-0128
K-RLED-C	16-pair LED zone annunciator with common controls. English.	Data Sheet K85005-0128
K-RLED24	24-pair LED zone expander with expander cable and zone card insert.	Data Sheet K85005-0128
K-RLED24R	24-pair LED zone expander with expander cable and zone card insert. Red.	Data Sheet K85005-0128

RKEY Remote key switch on plate for enabling or disabling common controls (Lock/Unlock).Data Sheet K85005-0128

#### Analog Control

#### **Annunciator Enclosures**

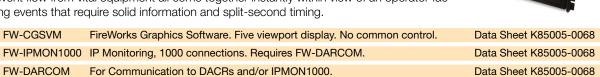


The RA Remote Annunciator Enclosures provide secure, surface mounted protection for annunciators and extenders. Each consists of a back plate, hinged cover, and key lock. The enclosures are 16-gauge welded steel with a white, painted finish. Each enclosure includes a security lock and two keys. The two- and three-position enclosures have wiring channels for correct routing of interconnections. The enclosures attach to a standard 4-inch square or 3-gang electrical boxes, and provide a mounting lip that takes the place of the integral mounting ring supplied with the annunciators and expanders.

RA-ENC1	One-position enclosure for Remote Annunciator.	Data Sheet K85005-0128
RA-ENC2	Two-position enclosure for Remote Annunciator and one Remote Expander.	Data Sheet K85005-0128
RA-ENC3	Three-position enclosure for Remote Annunciator and two Remote Expanders.	Data Sheet K85005-0128
LSRA-SB	Surface Mount Box	Data Sheet K85005-0128

#### **FireWorks Dynamic Graphical Annunciation Interface**

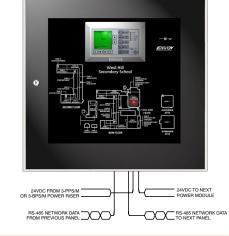
The FireWorks Graphical Annunciation Interface is a software platform that provides end users with clear, concise, and coordinated site incident information. FireWorks also supports optional text-based web clients to provide remote status updates. Five configurable graphical viewports offer simultaneous insight into different aspects of an incident, while the underlying software dynamically manages content in each viewport based on real-time events and user interaction. Facility maps, embedded HTML viewer, and live event flow from vital equipment all come together instantly within view of an operator facing events that require solid information and split-second timing.



#### **LED-based Graphic Annunication**

The GCI series of graphic annunicator drivers allow VS Series control panels to display events on an LED-based graphic annunciator. The GCI annunciator card supports 32 LEDs on the graphic panel display. It includes status LEDs and an internal buzzer. The graphic card is supplied with snap track mounting. It is attached to a plastic mounting rail that requires two EIA panels.

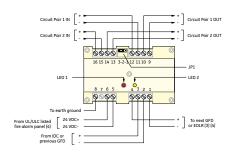
The annunciator communicates with the control panel on the RS 485 data riser, which can be configured for Class A or Class B communication. The annunciator does not provide ground fault isolation. The driver card communicates with and is powered by the control panel or by an approved power supply. Always ensure that National and Local approvals and requirements are met when selecting a graphic panel supplier.



GCI Graphic Annunciator Driver Data Sheet K85005-0130



### **Accessories**



#### **Ground Fault Detection Module**



The GFD module is designed to detect ground fault conditions on either of two independent power or data circuits. Each circuit must be balanced with respect to ground. The module will detect when the resistance between any of the monitored conductors and earth ground drops below 10 K Ohms. Two LEDs are provided to indicate the conductor with the ground condition. A normally energized Trouble/Ground Fault relay is provided with NO/NC relay contacts for interfacing with monitoring systems.

**GFD** 

Ground Fault Detection Module

Data Sheet K85010-0115

#### **CDR-3 Coder**



The CDR-3 Coder is an auxiliary circuit option module that provides two audio outputs, March Time and PSNI, (Positive, successive, non-interfering). Dry relay contacts are provided for PSNI code, march time and duration. For the PSNI code, the RS-232C input provides communications, between VM Series's RS-232 communications card and the CDR-3.

CDR-3

**PSNI Coder Module** 

Data Sheet K85003-02709

Intelligent Smoke Detectors p. 12

#### KI-Series

# Intelligent Initiating Devices

Kidde brand Intelligent addressable detectors are meticulously engineered to deliver high-performance features, superb reliability, and unbeatable quality. With their highly stable design, these detectors resist air movement caused by heating and air conditioning, making them reliable performers ideally suited to modern building interiors.

The installation and maintenance advantages of Kidde brand Intelligent addressable detectors add value throughout their service life. The twist-and-lock design makes short work of installation and maintenance operations. A plastic breakout on the detector housing optionally prevents removal from the base except with a special tool.

A bright, easy-to-see LED flashes red when the detector is in alarm, thus eliminating much of the guesswork when responding to front-panel indications.

#### **KI-Series Device loop**

VS Series control panels provide one device loop circuit that supports 125 detectors and 125 module addresses. V-SLC2 Loop Expander Cards provide additional device loops on the VS4 control panel. The V-SLC2-1 provides one loop with 250 additional addresses, and the V-SLC2-2 provides two loops totalling an additional 500 device addresses.

Circuit specifications		
Device loops	One loop, expandable to four (VS4), Class A or B.	
	Each loop support up to 250 device addresses	
Com. line voltage	Maximum 20 V peek-to-peek	
Circuit current	0.5 A max	
Circuit impedance	66Ω total, 0.5 μF, max	
Isolators	64 maximum	

# Class B Class A Loop 1 SEC Loop 1 PRI Loop ard Loop Loop Loop device device Data Line

Kidde heat and smoke detectors comprehensive self-diagnostic capability. The KI-PD, KI-PCD, and KI-PHD optical detectors continuously adjust their sensitivity to compensate for changes in the environment such as the presence of dirt, smoke, temperature, and humidity. These detectors issue a dirty sensor warning when they reach their preset limit.

#### Standard Features

- Optical, CO, heat, and multisensor models available
- Compatible standard, relay, isolator, and audible bases
- Electronic Addressing including mapping location
- Bases mount to standard North American twogang or 4" square electrical boxes
- Tamper-resistant feature
- Self diagnostic capability with on-board storage of results
- Optical detectors feature automatic rate compensated sensitivity adjustment, as well as dirty sensor warnings
- Manufactured to strict international ISO 9001 standards
- Assembled using surface mount technology for RF resistance
- Conformally coated components resist dust and humidity
- Automatic detector test
- Low Profile Design





### **KI-Series** Intelligent **Detectors**



#### **Optical and combination detectors**

KI-Series optical detectors continuously adjust their sensitivity based on fluctuating environmental conditions such as the presence of dirt, smoke, humidity, or changes in temperature and notify the control panel of any changes in sensor sensitivity. When the detector has adjusted its sensitivity to its maximum limit, it issues a dirty sensor warning, allowing enough of a margin for maintenance personnel to clean the detector before it goes into trouble condition. These detectors perform comprehensive self-diagnostics and store these details in their on-board memory.

#### **Optical Smoke Detector**

KI-OSD Optical Smoke Detector uses an optical sensing chamber to detect smoke. The detector analyzes data gathered by the sensor to determine when an alarm is initiated. Thanks to its high-performance optical sensing chamber, the KI-OSD responds quickly and reliably to a wide range of fire types, especially slow burning fires fuelled by combustibles typically found in modern multi-use buildings. The KI-OSD detects extremely small particles and triggers an alarm at the first sign of smoke.



KI-OSD

Intelligent Optical Smoke Detector

Data Sheet K85001-1001

#### **Optical Smoke/Fixed Temperature Heat Detector**

KI-OSHD Optical/Fixed Temperature Detector houses an optical sensing chamber that detects smoke, as well as a fixed-temperature sensor that detects heat. The detector analyzes data from both sensors to determine when an alarm is initiated. This combines the suitability of optical sensing for slow burning fires with the sensitivity of fixed-temperature detection for fast flaming fires, arriving at a solution that responds reliably to the widest range of fire types. A sophisticated algorithm processes data from both sensors over time so that an alarm is only reported when conditions precisely match the signature of a fire. This eliminates the shortcomings of single-sensor optical and heat detection, and significantly reduces the risk of nuisance alarms.



KI-OSHD

Intelligent Optical/Fixed Temperature Detector

Data Sheet K85001-1003

#### **Heat Detectors**

Thanks to advanced thermistor technology, KI-Series heat detectors are ideal for sensing fast, flaming fires and for applications where smoke detection is inappropriate. They are particularly well-suited to areas such as kitchens and shower rooms, where the ambient temperature is relatively constant, but where steam and smoke are present. These heat detectors are capable of performing comprehensive self-diagnostics and storing the results on board.

#### **Rate-of-Rise Heat Detector**

The KI-HRD Rate-of-Rise Heat Detector provides a 15°F (8°C) per minute rate-of-rise heat sensor for the detection of heat due to fire. The heat sensor monitors the temperature of the air and determines whether an alarm should be initiated.



KI-HRD Intelligent Rate-of-Rise Heat Detector Data Sheet 85001-0647

#### **Fixed Temperature Heat Detector**

KI-HFD Fixed Temperature Heat Detector provides a 135°F (57°C) fixed-temperature heat sensor for the detection of heat due to fire. The heat sensor monitors the temperature of the air and determines whether an alarm should be initiated.



KI-HFD Intelligent Addressable Fixed Temperature Heat Detector Data Sheet K85001-0647

#### **Carbon Monoxide Detectors**

Carbon Monoxide (CO) is the leading cause of accidental poisoning deaths in America. Known as The Silent Killer, CO is odorless, tasteless, and colorless. It claims nearly 500 lives, and results in more than 15,000 hospital visits annually. CO detection has rapidly become a standard part of life safety strategy. Monitored CO detection is mandated with increasing frequency in all types of commercial applications, but particularly in occupancies such as hotels, rooming houses, dormitories, day care facilities, schools, hospitals, assisted living facilities, and nursing homes. In fact, more than half of the U.S. population already lives in states requiring the installation of CO detectors in some commercial occupancies.

#### **Intelligent Fire Detectors with Integrated CO Sensor**

The KI series combine an integrated CO sensor with either Smoke, Heat or by itself to suit installation flexibility.



KI-OSCD	Intelligent Photoelectric Detector with CO Sensor	Data Sheet K85001-1002
KI-HCD	Intelligent 135 degree Heat Detector with CO Sensor	Data Sheet K85001-0657
KI-COD	Intelligent Life Safety CO Detector	Data Sheet K85001-0648
KI-OSHCD	Intelligent Multisensor Smoke, Heat, CO Detector	Data Sheet K85001-1004



### **KI-Series** Bases

Detector mounting bases have wiring terminals that are accessible from the room-side after mounting the base to the electrical box. The bases mount to North American one-gang boxes and to 3½ inch or 4 inch octagon boxes, 1½ inches (38 mm) deep. They also mount to European BESA and one-gang boxes with 60.3 mm fixing centers. The KI-SB4, KI-RB4, and KI-IB4 also mount to North American 4 inch sq. electrical boxes. They include the GSA-TS4 Trim Skirt, which is used to cover the "mounting ears" on the base. The KI-ABST mounts to a 4 inch square box only.



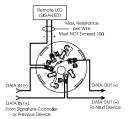
Base with 4-inch trim skirt

#### **KI-Series Detector Bases**

#### **Standard Detector Base**



Standard detector bases provide roomside wiring terminals. They mount to North American one-gang box, 3½ or 4-inch octagon boxes, or 4-inch square electric box. Bases for 4-inch square boxes include a trim skirt to conceal the electric box and provide a finished appearance.

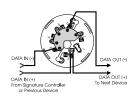


□KI-SB	□KI-SB4 (c/w 4-inch trim skirt)	Standard Detector Base	Data Sheet K85001-0646
GSA-LED	Remote alarm LED (use with standard	base only)	Data Sheet K85001-0646

#### **Isolator Detector Base**



Isolator detector bases provide room-side wiring terminals and includes a built-in line fault isolator. Models with integral switches allow the detector to be removed from its base without causing the isolator to operate. Mounts to North American one-gang box, 3½ or 4-inch octagon boxes, or 4-inch square electrical boxes.

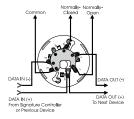


□KI-IB □KI-IB4 (c/w 4-inch trim skirt) Isolator Detector Base Data Sheet K85001-0646

#### **Relay Detector Base**



This base includes a relay. Normally-open or closed operation is selected during installation. The dry contact is rated for 1 amp (pilot duty) @ 30 Vdc. The relay's position is supervised to avoid accidentally jarring it out of position. The relay base does not support the SIGA-LED remote LED. It mounts to North American one-gang boxes, 3½ or 4-inch octagon boxes, or 4-inch square electrical boxes. Bases for 4-inch square boxes include a trim skirt.



□KI-RB □KI-RB4 (c/w 4-inch trim skirt) Relay Detector Base Data Sheet K85001-0646

#### **KI-Series Audible Detector Bases**

# SUBMIT V

#### **Audible (Sounder) Bases**



Sounder Bases for CO and fire detectors add audible output functions to KI-Series intelligent detectors. Audible bases can operate as independent local alarms, or as

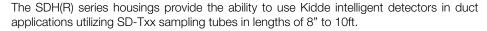
From power supply [24 VDC (+) as shown

From controller | SLC in (+) | SLC out (†) | To next device or previous device | SLC in (+) | SLC out (†) | To next device or previous device | SLC in (+) | SLC out (†) | To next device or previous device | SLC in (+) | SLC out (†) | To next device | SLC out (†) | To ne

part of a zone or system alarm with synchronized audible output. KI-ABLT is UL listed for sleeping areas and other applications requiring 520 Hz low frequency audible tones. KI-ABDT and KI-ABLT audible bases may be used with combination smoke/CO detectors when a GSA-T3T4 module is installed on the same data loop.

KI-ABLT	Low Frequency Sounder Base for KI-Series Detectors, 520 hz, T3/T4	Data Sheet K85001-0651
KI-ABDT	Sounder Base for KI-Series Detectors, 3k hz, T3/T4	Data Sheet K85001-0651
KI-ABST	Sounder Base for KI-Series Detectors, 3k hz, fire only	Data Sheet K85001-0646
AB4G-SB	Surface Box for Audible Base	Data Sheet K85001-0646

#### **Duct Housing**



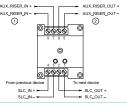


KI-SDH	Duct detector housing with standard base	Date sheet K85001-0326
KI-SDHR	Duct detector housing with relay base	Data sheet K85001-0326

#### **GSA-T3T4 Temporal Pattern Generator**



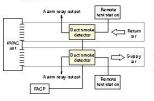
The GSA-T3T4 Temporal Pattern Generator is an addressable device that generates sound patterns for carbon monoxide (CO) (TC4 per NFPA 720) and fire signals (TC3 per NFPA 72) for the KI-ABDT or KI-ABLT sounder bases. The control panel sends synchronization and channel commands to the GSA-T3T4; the channel selection determines the pattern.



GSA-T3T4 Temporal Pattern Generator for KI-ABDT or KI-ABLT Sounder Bases Data Sheet K85001-0651

### **SuperDuct Duct Detectors**

Less than two inches deep, SuperDuct Intelligent addressable smoke detectors are ideal for installation in ductwork, where space is always at a premium. Offering the most advanced and most reliable performance in its class, SuperDuct represents the perfect balance of practical design and advanced technology.



SuperDuct detectors feature a unique design that speeds installation and simplifies maintenance. Removable dust filters, conformally coated circuit boards, and optional water-resistant gaskets keep contaminants away from components, ensuring years of trouble-free service. When cleaning is required, the assemblies come apart easily and snap back together in seconds.

GSA-SD	Intelligent Addressable SuperDu	ct Detector	Data S	neet K85001-0584
Sampling Tubes □SD-T42 (42")	□SD-T8 (8") □SD-T60 (60")	□SD-T18 (18") □SD-T78 (78")	□SD-T24 (24") □SD-T120 (120")	□SD-T36 (36")
Remote Test Stations	□SD-TRM (magnetic)	□SD-TRK (keyed)	□GSA-LED (Remote	e alarm LED)
Accessories  □SD-VTK (Air veloc	☐SD-GSK (cover gasket kit) ity test kit, stoppers only)	kit) □SD-MAG (Test magnet kit) □GSA-SDPCB (PCB sensor kit)		

Appliances

zardous cocation



Addressable initiating

# Input/Output Modules

**Kidde** input/output modules are extremely flexible and powerful devices that gather Intelligent information from the slave devices connected to them and convert this data into digital signals. They are available in models that mount in standard one- or two-gang electrical boxes, as well as versions that plug into UIO mother-boards.



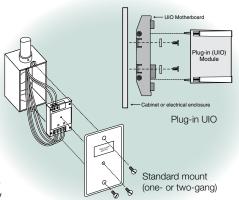
The actual function of each module is determined by its installer-selected personality code. This is downloaded to the module from the device controller during system configuration. Because they are intelligent devices, all decisions are made at the module. This allows lower communication speed but very fast control panel response time and less sensitivity to line noise and loop wiring properties. As a result, twisted or shielded wire is not required.

#### Module mounting and installation options

Kidde input/output modules are available in models that feature two mounting options: standard mount and plug-in.

Standard mount models are installed to North American two-gang or one-gang electrical boxes, making them ideal for locations where only one module is required. Separate I/O and data loop connections are made to each module.

Plug-in UIO modules mount to UIO motherboards. Two- and six-module UIO motherboards are available, making them ideal for installations where more than one module is required. Motherboards can accommodate individual risers for each on-board module, or shared risers in any combination with their UIO modules. All wiring connections are made to terminal blocks on the motherboard. UIO assemblies may be mounted in either cabinets, or standard electrical enclosures.





#### Universal Class A/B Module

The Universal Class A/B Module is used to connect initiating, appliance, or two-wire smoke circuits in either Class A or Class B configurations. The plug-in version can also be used as a Class A dry contact initiating device circuit. The actual function of this module is determined by the "personality code" selected by the installer. Up to fifteen personalities are available.



GSA-MAB

GSA-UM	Universal Class A/B Module (Two-gang standard mount)	Data Sheet K85001-0275
GSA-MAB	Universal Class A/B UIO (Plug-in) Module	Data Sheet K85001-0275

#### **Class B Input Module**

The Class B Input Module is used to connect Class B normally-open Alarm, Supervisory, or Monitor type dry contact initiating device circuits. The standard-mount version is available with either one or two input connections. The plug-in version accepts two input connections. The actual function of this module is determined by the "personality code" selected by the installer. A total of four personalities are available.



GSA-MCT2

GSA-CT1	Single Input Module (One-gang standard mount)	Data Sheet K85001-0241
GSA-CT1HT	Single Input High Temperature Module (One-gang standard mount)	Data Sheet K85001-0241
GSA-CT2	Dual Input Module (One-gang standard mount)	Data Sheet K85001-0241
GSA-MCT2	Dual Input UIO (Plug-in) Module	Data Sheet K85001-0241

#### Waterflow/Tamper Module

The GSA-WTM Waterflow/Tamper Module is a two circuit intelligent module. Circuit 1 is for Class B normally-open waterflow alarm switches. When the input contact is closed for approximately 16 seconds, an "alarm" signal is sent to the loop controller. Circuit 2 is for Class B normally open dry contact supervisory and tamper switches. When the input contact is closed, an "active" signal is sent to the loop controller. Conditions on both circuits are latched at the module.



GSA-WTM Waterflow/Tamper Module (One-gang standard mount) Data Sheet K85001-0297

#### **Isolator Module**

The GSA-IM2 Isolator Module is an intelligent device that allows part of the data loop to continue operating in the event of a short circuit. The module can be wired into a Class A data loop at any point. A maximum of 64 isolator modules can be installed on one circuit. If a fault occurs, the isolator cuts power to all devices beyond the isolator on the loop. Once activated, the line fault isolator continuously checks the faulted side of the loop to determine if the short still exists. When the fault is cleared, the module automatically restores the entire data loop to its normal condition.



CCA IMO

#### **Monitor Module**

The GSA-MM1 is a single-circuit intelligent module that includes a Class B normally-open dry contact. This is used for monitoring input from devices such as fans, dampers, and doors. When the input contact is closed, an "active" signal is sent to the loop controller. The active condition is not latched at the module.



GSA-MM1	Monitor Module (One-gang standard mount)	Data Sheet K85001-0297
---------	--	------------------------





#### Signal Module

The Signal Module is used to connect, upon command from the loop controller, supervised Class B signal or telephone circuits to their respective power inputs. Models are available with one or two power inputs. These may be either polarized 24 Vdc to operate audible and visual signal appliances, or 25 and 70VRMs to operate audio evacuation speakers and firefighter's telephones. The actual function of this module is determined by the "personality code" selected by the installer. A total of three personalities are available.



GSA-MCC1/MCC2

GSA-CC1	Single Input Signal Module (Two-gang standard mount)	Data Sheet K85001-0237
GSA-MCC1	Single Input Signal UIO (Plug-in) Module	Data Sheet K85001-0237
GSA-CC2	Dual Input Signal Module (Two-gang standard mount)	Data Sheet K85001-0237
GSA-MCC2	Dual Input Signal UIO (Plug-in) Module	Data Sheet K85001-0237

#### **Control Relay Module**

The Control Relay Module provides a Form C dry relay contact to control external appliances such as door closers, fans, dampers etc. This device does not provide supervision of the state of the relay contact. Instead, the on-board microprocessor ensures that the relay is in the proper ON/OFF state. Upon command from the loop controller, the relay activates the normally open or normally-closed contact. This module supports only one personality: no user configuration is required.



GSA-MCR

GSA-CR	Control Relay Module (One-gang standard mount)	Data Sheet K85001-0239
GSA-MCR	Control Relay UIO (Plug-in) Module	Data Sheet K85001-0239
GSA-CRH	High Power Control Relay Module (One-gang standard mount)	Data Sheet K85001-0644

#### **Polarity Reversal Relay Module**

The Polarity Reversal Relay Module provides a Form C dry relay contact to power and activate a series of GSA-AB4 Audible Sounder Bases. Upon command from the loop controller, the GSA-CRR reverses the polarity of its 24 Vdc output, thus activating all Sounder Bases on the data loop. This module supports only one personality: no user configuration is required.



GSA-MCRR

GSA-CRR	Polarity Reversal Relay Module (One-gang standard mount)	Data Sheet K85001-0239
GSA-MCRR	Polarity Reversal Relay UIO (Plug-in) Module	Data Sheet K85001-0239

#### **Synchronization Output Module**

The Synchronization Output Module is an Intelligent addressable device that connects a supervised output circuit to a 24 Vdc riser. The output wiring is monitored for open circuits and short circuits. A short circuit will cause the fire alarm control panel to inhibit the activation of the audible/visual signal circuit so the riser is not connected to the wiring fault. Upon command from the loop controller, the Auto-Sync Output Module connects the output circuit to the riser input.



GSA-MCC1S

GSA-CC1S	Synchronization Output Module (One-gang standard mount)	Data Sheet K85001-0543
GSA-MCC1S	Synchronization Output UIO (Plug-in) Module	Data Sheet K85001-0543

#### **Input/Output Module**

The Input/Output Module is an intelligent device that provides

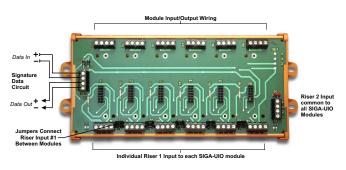
- Output with monitor input
- Input/programmable output
- Input/direct output

District and the following of the Control of the Co	50 00
54" NO	\$100110043
POR NATING AND NATIONAL AND RAPIDMENT COM	ATT CHICKLE SOMES THALES

GSA-MMIO

GSA-IO	Input/Output Module (One-gang standard mount)	Data Sheet K85001-0533
GSA-MIO	Input/Output UIO (Plug-in) Module	Data Sheet K85001-0533

#### Universal Input/Output (UIO) Motherboards



Universal Input/Output Module Motherboards provide mounting and wiring terminations for up to six plug-in UIO (GSA-"M" series) modules. UIO modules plug into the board and are held securely in place with captive machine screws. All field wiring connects to terminal blocks on the motherboard, which permits rapid removal and replacement of modules for troubleshooting. Motherboards feature a riser #1 input and a riser #2 input bus. Jumpers on riser #1 input (between modules), facilitate sharing a single riser among more than one module. This significantly reduces wiring requirements. UIO motherboards mount inside the

MFC-A cabinet or other suitable UL-listed electrical enclosure.

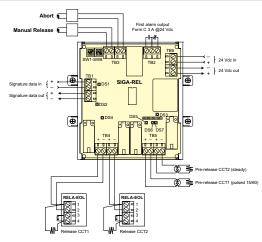
GSA-UIO2R	Universal Input/Output Module Board with Riser Inputs $-\ 2$ Module Positions	Data Sheet K85001-0365
GSA-UIO6R	Universal Input/Output Module Board with Riser Inputs $-\ 6$ Module Positions	Data Sheet K85001-0365
GSA-UIO6	Universal Input/Output Module Board — 6 Module Positions	Data Sheet K85001-0365

#### **Releasing Module**



The GSA-REL Releasing Module is an Intelligent addressable device that works with fire suppression systems designed to release extinguishing gas such as Halon. Its primary function is the control of sprinkler pre-action routines and the initiation of suppression system deluge functions. The module is easily configured in the field and offers a wide range of options that

prevent the unnecessary release of extinguishing agent. The releasing module includes a built-in timer that inhibits the deluge function during the pre-action routine. One of four pre-action routines, may be selected by means of dip-switches on the module. The duration of



automatic and manual time delays, as well as the abort time settings are also selectable with dip-switches. The GSA-REL mounts inside an MFC-A cabinet or other suitable UL-listed electrical enclosure. Each MFC-A will hold one GSA-REL.

GSA-REL	Intelligent addressable releasing module	Data Sheet K85001-0531
RELA-ABT	Abort station	Data Sheet K85001-0531
RELA-SRV-1	Service disconnect station	Data Sheet K85001-0531
276A-REL	Manual releasing station (single-action)	Data Sheet K85001-0531
278A-REL	Manual releasing station (double-action)	Data Sheet K85001-0531
RELA-EOL	Polarized end-of-line relay	Data Sheet K85001-0531

#### **Related Equipment**



MFC-A	Multi-function Cabinet (for UIO and Releasing modules)	
27193-11	Surface Mount Box - Red, One-gang	
27193-16	Surface Mount Box - White, One-gang	
27193-21	Surface Mount Box - Red, Two-gang	
27193-26	Surface Mount Box - White, Two-gang	
235196P	Bi-polar Transient Protector (use with all Signal Modules)	
GSA-MP1	Module Mounting Plate, 1 footprint	
GSA-MP2	Module Mounting Plate, 1/2 footprint	
GSA-MP2L	Module Mounting Plate, 1/2 extended footprint	



Addressable initiating

### **Manual Pull Stations**



#### **Single Action Pull Stations**

GSA-M270 series manual pull stations are made from die-cast zinc and finished with red epoxy powder-coat paint. With positive pull-lever operation, one pull on the station handle breaks the rod and turns in a positive alarm. Where two-stage operation is required, GSA-M270P pre-signal models are equipped with a general alarm (GA) keyswitch.

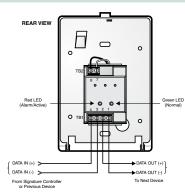
			~~	
REAR VIEW				
	тв2	B 7	0	
Red LED (Alarm/Active)	브픈	• • • <b>•</b>		Green LED (Normal)
	°°		0	
			<u>a</u>	
DATA IN (+)		╝╙═	DATA OL	}
From Signature Controlle or Previous Device	r		To Next E	

GSA-M270	One Stage Fire Alarm Station, English Markings	Data Sheet K85001-0279
GSA-M270P	Two Stage (Pre-signal) Fire Alarm Station, English Markings	Data Sheet K85001-0279
276-K2	GA Key — for pre-signal station	Data Sheet K85001-0279
270-GLR	20 Break-rods — for GSA-M270 series	Data Sheet K85001-0279
276B-RSB	Surface Mount Box, Red — for GSA-M270 series	Data Sheet K85001-0279



#### **Double Action Pull Stations**

The double action, single stage GSA-M278 station is a contemporary style manual station made from durable red LEXAN. To initiate an alarm, first lift the upper door, then pull the alarm handle.



GSA-M278	Double Action (One Stage) Fire Alarm Station, English Markings	Data Sheet K85001-0279
276B-RSB	Surface Mount Box, Red — for GSA-M278 series	Data Sheet K85001-0279
276-GLR	20 Break-rods — for GSA-M278 series	Data Sheet K85001-0279

#### **Manual Station Relocator**

The Manual Station Relocator is designed to lower the height of a fire alarm pull station to meet ADA requirements. Most existing pull stations are mounted 60 inches (1524mm) or higher above the floor. The Relocator lowers the height to 48 inches (1220mm) without the need for pulling new wires or moving the existing electrical box.

RR-32RL Pull Station Relocator Data Sheet K85001-0351



#### Stopper II

This unique device helps prevent false alarms without restricting legitimate ones. It consists of a tamperproof clear LEXAN polycarbonate shield and frame that fits easily over manual pull stations. When lifted, it sounds a piercing warning horn.

☐ STI-1100 (Flush)	☐ STI-1130 (Surface)	Stopper II with Horn	Data Sheet K85001-0491
☐ STI-1200 (Flush)	☐ STI-1230 (Surface)	Stopper II without Horn	Data Sheet K85001-0491
☐ STI-3100 (2" Spacer)	☐ STI-3004 (Conduit Insert)	Spacers	Data Sheet K85001-0491
☐ STI-3002 (Gasket)	☐ STI-3003 (Conduit Gasket)	Weatherproofing	Data Sheet K85001-0491



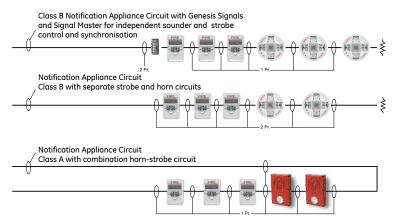
- LED Compact Strobes, Horns & Horn-Strobes p. 23
  - LED Ceiling Strobes, Horns, Horn-Strobes p. 24
    - LED Wall Speakers & Speaker-Strobes p. 25
    - LED Ceiling Speakers, Horns & Strobes p. 26
    - Low Frequency Horns and Horn-Strobes p. 27
      - Outdoor Horns & Strobes p. 28
      - Outdoor Speakers & Strobes p. 29
        - Audible Signals p. 31
      - Harsh Environment Signals p. 34
        - Accessories p. 35
      - Audio Notification System p. 36

### Notification **Appliances**

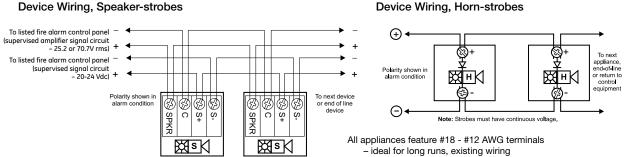
Kidde notification appliances are high-performance devices finely tuned to deliver maximum output in exchange for the lowest possible current draw. Covering the entire spectrum of life safety applications, these devices are durable, dependable, and virtually maintenance-free. And they support a wide range of mounting options that make them ideal for new construction and retrofit applications alike.

#### Field Wiring

Notification appliances may be configured for Class A or Class B wiring. Genesis combination horn-strobes, when used with the innovative Signal Master Module, support independent horn control over a single pair of wires and precision synchronization that exceeds UL requirements. This reduces wiring time while meeting the requirements of even the most demanding application.



#### Device Wiring, Speaker-strobes



#### Strobe Synchronization

On a common circuit, strobes flash once per second (1 fps) within 10 milliseconds over a two-hour time period. A synchronization source is required to comply with UL 1971 synchronization standards. Temporal setting (private mode only): synchronized to temporal output on the same circuit. Genesis LED strobes are synchronized, backwards compatible, and can be used in the same field of view as Genesis Xenon strobes.

#### Synchronization Sources

The following control panels, power supplies, and modules provide synchronization sources that enable Genesis strobe devices to comply with UL 1971 synchronization standards: GSA-CC1S, GSA-MCC1S, SIGA-CC2A, GSA-MCC2A, MG1M-RM, MIRBPS6A, MIRBPS10A, APS6A, APS10A, VM Series, VS1, VS4, VM, FX Series Intelligent and Conventional control panels.



# Genesis Visual & Audible Signals

A complete line engineered to deliver innovative features and superb output.



LED Compact Strobes, Horns, Horn-Strobes, p. 23



LED Wall Strobes, Horns, Horn-Strobes p. 24



LED Ceiling Strobes, Horns, Horn-Strobes p. 25



LED Wall Speakers and Speaker-strobes, p. 26



LED Ceiling Speakers, Speaker-strobes, p. 27



Low Frequency Horns and Horn-Strobes, p. 28



Outdoor Horns, Horn-Strobes, p. 29



Outdoor Speakers, Speaker-Strobes, p. 30

The award-winning Genesis line of products represents excellence in fire alarm notification with looks, features, and performance benefits designed with your project in mind. Wall strobes, horns, and chimes about the size of a deck of playing cards offer a discreet alternative to bulky devices, while speakers and ceiling models with clean modern lines blend inconspicuously with their surroundings.

#### Signaling on-demand

Though designed for discretion, Genesis signals are also engineered to command attention. Wall-penetrating high dB output and patented strobe technology immerse the protected area with levels of light and sound that simply can't be ignored – all in exchange for the lowest current demands of any device in their class.

Genesis brings on-demand signaling to every application with an unparalleled range of field-configurable options: horns and chimes with high/low dB output settings; speakers with multiple wattage tap selections; and strobes with selectable candela output and flash rate – options that put you in the driver's seat when time is short, budgets slim, and manpower at a premium. It also means fewer parts to stock, less inventory to worry about, and the flexibility to meet changing demands – on the fly – without having to reinstall equipment or order more parts!

#### Application flexibility

Whether you're designing for a new landmark structure, or simply retrofitting a local strip mall, competitively-priced Genesis signals bring value, good looks, and installation flexibility to every application. Contact Kidde today to learn how your signal solutions can be the model of discretion.

# LED Strobes, Horns & Horn-Strobes

Genesis LED EG1 Series horns and LED strobes feature a sleek, low-profile design and energy-efficient technology that makes them less expensive to install and operate by reducing overhead. High-performance LEDs and patented electronics allow for more devices per loop and fewer booster power supplies.



**Genesis strobes** offer 15 to 75 candela output, which is selectable with a conveniently located switch on the side of the device. The current is only 24mA VDC and 32mA VFWR for all light output settings. The candela output setting remains clearly visible even after final installation, yet it stays locked in place to prevent unauthorized tampering. (Data Sheet K85001-0667)

	•			FIRE	
White housing	White housing	Red housing	Red housing		
	<b>♦</b> with "FIRE"		♦ with "FIRE"	23160	Ш
□ EG1VWN	□ EG1VWF	□ EG1VRN	□ EG1VRF		

**Genesis Horns** reach output levels as high as 92 dB and feature a unique multiple-frequency tone that results in excellent wall penetration and an unmistakable warning of danger. Horns may be configured for either constant or temporal 3 output and high or low dB output with a conveniently located switch under the cover. No more cutting jumpers. Horns operate at 13mA VDC and 15mA VFWR on Low dB output and 23mA VDC and 29mA VFWR on High dB output. (Data Sheet K85001-0667)

White housing	White housing	Red housing	Red housing	FIRE
□ EG1AWN	□ EG1AWF	□ EG1ARN	□ EG1ARF	

**Genesis Horn-strobes** provide a low-profile design with horn output reaching as high as 92 dBA and as low as 80 dBA and have strobes that offer 15 to 75 candela output. Both the horn and strobe can be field configured with a switch, which is conveniently located on the side of the device. The candela output setting remains clearly visible even after final installation, yet it stays locked in place to prevent unauthorized tampering. Horns may be configured for either constant or temporal 3 output and high or low dB output. Horn-Strobes operate at 35mA VDC and 43mA VFWR on Low dB output and 45mA VDC and 55mA VFWR on High dB output for all light output settings. (*Data Sheet E85001-0667*)

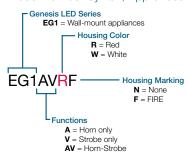
White housing	White housing	Red housing	Red housing	FIRE	FIRE
□ EG1AVWN	□ EG1AVWF	□ EG1AVRN	□ EG1AVRF		1020

Trim plates for wall horns, horn-strobes, and strobes are ideal for covering openings left behind during retrofits.

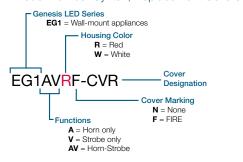
White plate	Red plate <b>∲</b> no marking	Trim Plates	FIRE
□ EG1TW	□EG1TR	Trim plate for 2-gang or 4" boxes	

Replacement covers are available for all models. When ordering add -CVR to the model number.

#### Model Number Syntax, Appliances



#### Model Number Syntax, Replacement Covers



SUBMIT



Notification Appliances

SUBMIT

Genesis LED Series Wall Models

# LED Strobes, Horns & Horn-Strobes

Genesis LED EG4 Series horns and LED strobes feature a sleek, low-profile design and energy-efficient technology that makes them less expensive to install and operate by reducing overhead. High-performance LEDs and patented electronics allow for more devices per loop and fewer booster power supplies. Genesis LED EG4 devices mount to the required GP10 room side wiring plate for installation. The GP10 mounting plate is included with the EG4 device for convenient pre-installing and pre-wiring.



**Genesis strobes** offer 15 to 110 candela output, which is selectable with a conveniently located switch on the side of the device. The current is only 28mA VDC and 36mA VFWR for all light output settings. The candela output setting remains clearly visible even after final installation, yet it stays locked in place to prevent unauthorized tampering. (Data Sheet K85001-0668)

White housing	White housing	Red housing	Red housing	
□ EG4VWN	□ EG4VWF	□ EG4VRN	□ EG4VRF	DANAG

**Genesis Horns** reach output levels as high as 92 dB and feature a unique multiple-frequency tone that results in excellent wall penetration and an unmistakable warning of danger. Horns may be configured for either constant or temporal 3 output and high or low dB output with a conveniently located switch under the cover. No more cutting jumpers. Horns operate at 18mA VDC and 22mA VFWR on Low dB output and 28mA VDC and 38mA VFWR on High dB output. (Data Sheet K85001-0668)

White housing	White housing	Red housing	Red housing	
□ EG4AWN	☐ EG4AWF	☐ EG4ARN	□ EG4ARF	

**Genesis Horn-strobes** provide a low-profile design with horn output reaching as high as 92 dBA and as low as 80 dBA and have strobes that offer 15 to 110 candela output. Both the horn and strobe can be field configured with a switch, which is conveniently located on the side of the device. The candela output setting remains clearly visible even after final installation, yet it stays locked in place to prevent unauthorized tampering. Horns may be configured for either constant or temporal 3 output and high or low dB output. Horn-Strobes operate at 40mA VDC and 48mA VFWR on Low dB output and 50mA VDC and 60mA VFWR on High dB output for all light output settings. (*Data Sheet K85001-0668*)

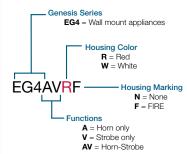
White housing	White housing	Red housing	Red housing	F	
☐ EG4AVWN	□ EG4AVWF	□ EG4AVRN	□ EG4AVRF	F E	B785

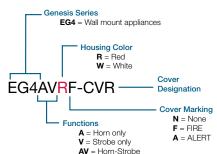
Accessories including required room side wiring plate and trim plates ideal for openings left behind during retrofits.

White plate	Red plate	Room Side Wiring Plate (Included)	<b></b>	
□ EG4TW	□ EG4TR			

Replacement covers are available for all models. When ordering add -CVR to the model number.

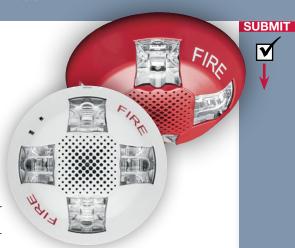
#### Model Number Syntax, Appliances





# LED Strobes, Horns & Horn-Strobes

Genesis LED EGC Series horns and LED strobes feature a sleek, low-profile design and energy-efficient technology that makes them less expensive to install and operate by reducing overhead. High-performance LEDs and patented electronics allow for more devices per loop and fewer booster power supplies. Genesis LED EGC devices mount to the required room side wiring plate for installation. The GP10 mounting plate is included with the EGC device for convenient pre-installing and pre-wiring.



**Genesis strobes** offer 15 to 115 candela output, which is selectable with a conveniently located switch on the side of the device. The current is only 35mA VDC and 45mA VFWR for all light output settings. The candela output setting remains clearly visible even after final installation, yet it stays locked in place to prevent unauthorized tampering. (Data Sheet K85001-1021)

White housing	White housing	Red housing	Red housing		TAKE STATE	
□EGCVWN	□EGCVWF	□EGCVRN	□EGCVRF	Walls (		

**Genesis Horns** reach output levels as high as 92 dB and feature a unique multiple-frequency tone that results in excellent wall penetration and an unmistakable warning of danger. Horns may be configured for either constant or temporal 3 output and high or low dB output with a conveniently located switch under the cover. No more cutting jumpers. Horns operate at 20mA VDC and 25mA VFWR on Low dB output and 30mA VDC and 40mA VFWR on High dB output. (Data Sheet K85001-1021)

White housing	Red housing	· Tike	
□EGCAWF	□EGCARF	Way .	

**Genesis Horn-strobes** provide a low-profile design with horn output reaching as high as 92 dBA and as low as 80 dBA and have strobes that offer 15 to 115 candela output. Both the horn and strobe can be field configured with a switch, which is conveniently located on the side of the device. The candela output setting remains clearly visible even after final installation, yet it stays locked in place to prevent unauthorized tampering. Horns may be configured for either constant or temporal 3 output and high or low dB output. Horn-Strobes operate at 50mA VDC and 60mA VFWR on Low dB output and 60mA VDC and 75mA VFWR on High dB output for all light output settings. (*Data Sheet K85001-1021*)

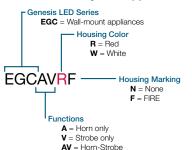
White housing	White housing	Red housing	Red housing	
		▼ with "FIRE"		
□EGCAVWN	□EGCAVWF	□EGCAVRN	□EGCAVRF	The state of the s

**Accessories** including required room side wiring plate and trim plates ideal for openings left behind during retrofits.

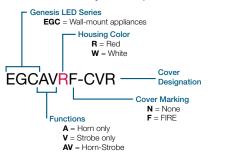
White plate	Red plate	Room Side Wiring Plate (Included)	
□EGCTW	□EGCTR		

Replacement covers are available for all models. When ordering add -CVR to the model number.

#### Model Number Syntax, Appliances



Note: GC devices are designed for ceiling applications but are UL listed to be wall or ceiling mounted.





Notification Appliances

SUBMIT



Genesis LED Series Wall Models

# LED Speakers & Speaker-Strobes

Genesis LED EG4S Series speakers and speaker-strobes combine high performance output with a sleek low profile design and energy-efficient technology that makes them less expensive to install and operate. High

performance LEDs require fewer power supplies, backup power, and batteries. These new appliances are designed with energy-efficiency, and life safety in mind. Understanding the content of the message is as important as knowing there is an emergency.

Intelligibility is measured in Speech Transmission Index and anything above .76 is considered excellent. G4S Series speakers deliver audio with an STI of .81 ensuring the message is clear. They also meet NFPA and UL 520Hz requirements for sleeping areas making them ideal for new construction or retrofits. Genesis LED appliances mount to the required GRSW room side wiring plate for installation. The GRSW mounting plate is included with the EG4S for convenient pre-installing and pre-wiring.

**Genesis Speakers** feature selectable wattage taps that are visible after installation. Speakers are also capable of both 25V and 70V and voltage in a single model with a field selectable switch. Speakers meet NFPA and UL 520Hz requirements for sleeping areas and have an STI rating of .81 ensuring speakers deliver a clear, highly intelligible message. (Data Sheet K85001-1026)

White housing	White housing	Red housing	Red housing	White housing	
☐ EG4SWN	□ EG4SWF	☐ EG4SRN	□ EG4SRF	□ EG4SWA	

**Genesis Speaker-strobes** feature selectable wattage taps, and allow for both wattage and light output levels to be configured in the field. Both settings remain clearly visible — even after final installation. Speakers are also capable of both 25V and 70V and voltage in a single model with a field selectable switch. Speakers meet NFPA and UL 520Hz requirements for sleeping areas and have an STI rating of .81 ensuring speakers deliver a clear, highly intelligible message. Speaker-strobes feature field-selectable 15, 30,75, or 110 cd light output and have a constant current draw for all light output settings of 28mA for VDC and 36mA for VFWR. (*Data Sheet K85001-1026*)

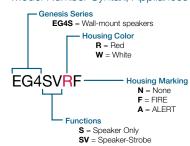
White housing	White housing	Red housing	Red housing	White housing ▼ with "ALERT"	F	
□ EG4SVWN	□ EG4SVWF	☐ EG4SVRN	□ EG4SVRF	□ EG4SVWA		020 020

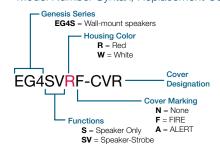
Accessories including required room side wiring plate and trim plates ideal for openings left behind during retrofits.

1	e plate o marking	Red plate	Room Side Wiring Plate (Included)	() -1 ()	
	4TW	□ EG4TR		C. E.S	

Replacement covers are available for all models. When ordering add -CVR to the model number.

#### Model Number Syntax, Appliances



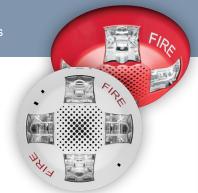




Notification Appliances

Genesis LED Series Ceiling Models

# LED Speakers & Speaker-Strobes





Genesis LED EGCS Series speakers and speaker-strobes combine high performance output with a sleek low profile design and energy-efficient technology that makes them less expensive to install and operate. High performance LEDs require fewer power supplies, backup power, and batteries. These new appliances are designed with energy-efficiency, and life safety in mind. Understanding the content of the message is as important as knowing there is an emergency. Intelligibility is measured in Speech Transmission Index and anything above .76 is considered excellent. G4S Series speakers deliver audio with an STI of .81 ensuring the message is clear. They also meet NFPA and UL 520Hz requirements for sleeping areas making them ideal for new construction or retrofits. Genesis LED EGCS appliances mount to the required GRSW room side wiring plate for installation. The GRSW mounting plate is included with the GCS device for convenient pre-installing and pre-wiring.

**Genesis Speakers** feature selectable wattage taps that are visible after installation. Speakers are also capable of both 25V and 70V and voltage in a single model with a field selectable switch. Speakers meet NFPA and UL 520Hz requirements for sleeping areas and have an STI rating of .81 ensuring speakers deliver a clear, highly intelligible message. (Data Sheet K85001-1025)

White housing	White housing	Red housing	Red housing	White housing <b>▼</b> with "ALERT"	W.
□EGCSWN	□EGCSWF	□EGCSRN	□EGCSRF	□EGCSWA	

**Genesis Speaker-strobes** feature selectable wattage taps, and allow for both wattage and light output levels to be configured in the field. Both settings remain clearly visible — even after final installation. Speakers are also capable of both 25V and 70V and voltage in a single model with a field selectable switch. Speakers meet NFPA and UL 520Hz requirements for sleeping areas and have an STI rating of .81 ensuring speakers deliver a clear, highly intelligible message. Speaker-strobes feature field-selectable 15, 30,75, or 115 cd light output and have a constant current draw for all light output settings of 35mA for VDC and 45mA for VFWR. (Data Sheet K85001-1025)

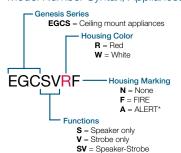
White housing	White housing	Red housing	Red housing	White housing	FIRE	
□EGCSVWN	□EGCSVWF	□EGCSVRN	□EGCSVRF	□EGCSWA		May 3

Accessories including required room side wiring plate and trim plates ideal for openings left behind during retrofits.

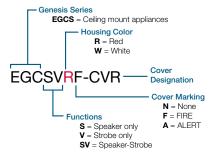
White plate	Red plate	Room Side Wiring Plate (Included)		. S . A S
□EGCTW	□EGCTR		Como	,,

Replacement covers are available for all models. When ordering add -CVR to the model number.

#### Model Number Syntax, Appliances



Note: GC devices are designed for ceiling applications but are UL listed to be wall or ceiling mounted.



SUBMIT

Genesis G4LF Series Wall Models

## Low Frequency (520 Hz) Horns and Horn-Strobes

G4LF Series notification appliances provide the benefits of Genesis life safety signals with output suitable for sleeping areas and other applications requiring low frequency audible tones. These high-performance appliances generate a crisp 520 Hz tone in the standard 3-3 temporal pattern. An optional setting configures the appliance for continuous audible output — a critical feature for notification appliance circuits that are coded with a CDR-3 coder module. All G4LF appliances feature field-configurable high and low dB output settings. Horn-Strobe models feature field-selectable 15, 30, 75 or 110 cd output settings.



G4LFWN-HVM	Horn-Strobe, 520 Hz, White Housing, No Marking, 15/30/75/110 cd	Data Sheet K85001-0639
G4LFWF-HVM	Horn-Strobe, 520 Hz, White Housing, FIRE Marking, 15/30/75/110 cd	Data Sheet K85001-0639
G4LFRN-HVM	Horn-Strobe, 520 Hz, Red Housing, No Marking, 15/30/75/110 cd	Data Sheet K85001-0639
G4LFRF-HVM	Horn-Strobe, 520 Hz, Red Housing, FIRE Marking, 15/30/75/110 cd	Data Sheet K85001-0639
G4LFWN-H	Horn, 520 Hz, White Housing, No Marking	Data Sheet K85001-0639
G4LFWF-H	Horn, 520 Hz, White Housing, FIRE Marking	Data Sheet K85001-0639
G4LFRN-H	Horn, 520 Hz, Red Housing, No Marking	Data Sheet K85001-0639
G4LFRF-H	Horn, 520 Hz, Red Housing, FIRE Marking	Data Sheet K85001-0639

Genesis WG4 Series Wall Models

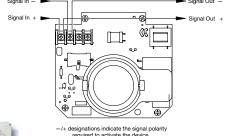
## Weatherproof Horns and Horn-Strobes

Genesis WG4 Series horns and horn-strobes are among the most versatile emergency signals of their kind. Rated for indoor or outdoor use, they are suitable for a wide range of wet and harsh environments with a listed operating temperature range of as low as -31°F to as high as 151°F (-35°C to 66°C).

Refer to Data Sheet K85001-0628 -- Genesis Outdoor Horns and Strobes for details.



Genesis WG4 strobes feature four selectable light output settings. Cd selections are changed by removing the cover and simply sliding the switches to the desired setting, which remains visible through a small window on the front of the device after the cover is replaced. Genesis Horn-strobes may also be configured for high or low dB output and temporal flash. This battery-saving feature is intended for private mode signaling only.





#### **Light Output**

#### Standard Candela Horn-strobes

Standa	rd/rating	Strobe Switch Position			osition		
Stariua	ru/rating	D	С	В	Α		
UL 1971	Indoor	15 cd	29 cd	70 cd	87 cd		
UL 1638	Outdoor @ -35°C	6 cd	12 cd	28 cd	35 cd		
CAN/ULC-S526	Outdoor @ -40°C	1 cd	3 cd	8 cd	10 cd		

#### **High Candela Horn-strobes**

Standa	rd/rating	Stro	obe Swit	ch Posit	ion
Stanua	ru/raung	D	С	В	Α
UL 1971	Indoor	102cd	123cd	147cd	161cd
UL 1638	Outdoor @ -35°C	41cd	50 cd	60 cd	65 cd
CAN/ULC-S526	Outdoor @ -40°C	11 cd	14 cd	17 cd	18 cd

White housing	White housing	Red housing	Red housing	Outdoor Fire Alarm Appliances
□ WG4WN-H	□ WG4WF-H	□ WG4RN-H	□ WG4RF-H	Horn Only
□ WG4WN-HVMC	☐ WG4WF-HVMC	□ WG4RN-HVMC	□ WG4RF-HVMC	Horn-Strobe, standard cd output
□ WG4WN-HVMHC	□ WG4WF-HVMHC	□ WG4RN-HVMHC	□ WG4RF-HVMHC	Horn Only, high cd output

#### **WG4 Mounting Accessories**

☐ WG4WTS (white)	☐ WG4RTS (red)	Surface Skirt for Genesis WG4 Appliances	
☐ 74347U (white)	☐ 449 (red)	Surface mount box, outdoor rated	
WG4GSKT		Genesis WG4 Full Body Mounting Gasket for Smooth Surfaces	

For Audible Sounder Bases, see Intelligent Initiating Devices.

SUBMIT



Genesis WG4 Series Wall Models

## Weatherproof Speakers and Speaker-Strobes

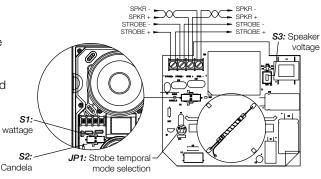
Genesis WG4 Series speakers and speaker-strobes are among the most versatile emergency signals of their kind. Rated for indoor or outdoor use, they are suitable for a wide range of wet and harsh environments with a listed operating temperature range of as low as -31°F to as high as 151°F (-35°C to 66°C).



Refer to Data Sheet K85001-0626 -- Genesis Outdoor Speakers and Strobes for details.

#### **Field Configuration**

Genesis WG4 speakers may be set 70- or 25-Volt operation, and for  $\frac{1}{4}$ ,  $\frac{1}{2}$ , 1, or 2 watt operation. Strobe models feature four selectable light output settings. Wattage and cd selections are changed by removing the cover and simply sliding the switches to the desired settings, which remain visible through a small window on the front of the device after the cover is replaced. Genesis speaker-strobes may also be configured for temporal flash. This battery-saving feature is intended for private mode signaling only. To set the device for temporal flash, snip the jumper at JP1.





White housing	White housing	Red housing	Red housing	Fire Alarm Speakers
□WG4WN-S	□WG4WF-S	□WG4RN-S	□WG4RF-S	25/70 V Speaker
□WG4WN-SVMC	□WG4WF-SVMC	□WG4RN-SVMC	□WG4RF-SVMC	25/70 V Speaker-strobe (15/29/70/87 cd)
	□WG4WF-SVMHC	□WG4RN-SVMHC	□WG4RF-SVMHC	25/70 V Speaker-strobe (102/123/147/161 cd)

**Genesis mass notification speakers and speaker-strobes** bring the same high-performance fire alarm features and unobtrusive design to mass notification applications. Available with amber lenses and optional "ALERT" lettering, they are ideal for applications that require differentiation between fire alarm and mass notification alerts.

White housing	White housing <b>▼</b> "ALERT"	Mass Notification Speakers  — white housing, no "Running Man" icon
□ WG4WN-SVMA	☐ WG4WA-SVMA	25/70 V Speaker-strobe, amber lens (13/25/5962 cd output)
□ WG4WN-SVMHA	☐ WG4WA-SVMHA	25/70 V Speaker-strobe, amber lens (84/101/125/130 cd output)
	☐ WG4WA-SVMC	25/70 V Speaker-strobe, clear lens (15/29/70/87 cd output)
□ WG4WN-SVMHC	☐ WG4WA-SVMHC	25/70 V Speaker-strobe, clear lens (102/123/147/161 cd output)
□ WG4WA-S	25/70 V Speaker	

#### Trim skirts

☐ WG4WTS (white)	☐ WG4RTS (red)	Surface Skirt for Genesis WG4 appliance family.

## **Audible Signals**

#### **Fire Alarm Bells**

Kidde fire alarm bells are of the underdome type with heavy-duty mechanisms. Gongs are made of selected alloy steel to generate the loud, resonant tones. For weatherproof application, optional surface weatherproof backboxes are available.

☐ 323D-10AW (Grey)	□323D-10AW-R (Red)	10-inch Single Stroke, Diode — 20-24Vdc	Data Sheet E85001-0333
☐ 439D-6AW (Grev)	□439D-6AW-R (Red)	6-inch Vibrating, Diode — 20-24Vdc	Data Sheet E85001-0333
(	—		
T 400D 404V4/0	T 400D 40AM D (D 1)	40: 11/11 1: 5: 1 00.04/1	D   0    F05004 0000
□439D-10AW (Grey)	□439D-10AW-R (Red)	10-inch Vibrating, Diode — 20-24Vdc	Data Sheet E85001-0333



#### **Multiple Tone Signal**

The 5530MD-24AW is a weatherproof heavy-duty industrial, tone-selectable, signaling device capable of producing volume-controlled, high-decibel tones. It uses a microprocessor circuit to create 27 distinctive tones. A single tone may be selected by setting a miniature dip switch within the unit.

5530MD-24AW	27-Tone Selectable Signal — 24Vdc	Data Sheet K85001-0415
-------------	-----------------------------------	------------------------



#### Multi-purpose Loudspeaker

The HPSA15 loudspeaker is a high-efficiency double re-entrant loudspeaker that operates within a nominal frequency response range of 400-14,000 Hz, and provides audible output of 120 dB (peak at one meter) at the rated power level. It includes a versatile, three-way, 25/70.7 V line transformer that meets a variety of distributed system needs. The transformer is adjustable by means of a convenient seven-position, watts/impedance selection switch.

HPSA15R2570	15-watt loudspeaker, red	Data Sheet K85001-0591
HPSA15G2570	15-watt loudspeaker, gray	Data Sheet K85001-0591

## **Medium Power Speaker Arrays**



#### **Mass Notification**

The Kidde HyperSpike® Series TCPA-10 is intended for indoor and outdoor audio signaling and notification. Its best-in-class acoustic coverage allows for fewer units to be installed in large indoor and outdoor areas, lowering installation and long-term maintenance costs, while also improving intelligibility and aesthetics..

<b>\</b>	▼ Color:	MPSA Assemblies	
□ 90215A-801-01-L	□Black	UL 1480 listed C1D2 certified TCPA-10 Distributed Audio Speaker with 5 selectable power taps that run off of 25V, 70V and 100 VRMS audio systems	Data Sheet K85001-0669
□ 90215A-801-04-L	□Gray	UL 1480 listed C1D2 certified TCPA-10 Distributed Audio Speaker with 5 selectable power taps that run off of 25V, 70V and 100 VRMS audio systems	Data Sheet K85001-0669
□ 90215A-801-05-L	□Red	UL 1480 listed C1D2 certified TCPA-10 Distributed Audio Speaker with 5 selectable power taps that run off of 25V, 70V and 100 VRMS audio systems	Data Sheet K85001-0669
□ 90215A-801-06-L	□White	UL 1480 listed C1D2 certified TCPA-10 Distributed Audio Speaker with 5 selectable power taps that run off of 25V, 70V and 100 VRMS audio systems	Data Sheet K85001-0669

SUBMIT



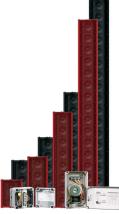
Kidde brand Hyperspike Series Medium Power loudspeakers employ exclusive HyperSpike technology to deliver lightweight and acoustically sophisticated solutions for large indoor and smaller outdoor mass notification installations.



#### **UL Listed 250-Watt Medium Power Speaker Arrays**

Kidde brand Model 250 Hyperspike Series UL Listed Medium Power loudspeakers employ HyperSpike® technology to deliver lightweight and acoustically sophisticated solutions for large indoor and smaller outdoor mass notification installations. These UL Listed units are omni-directional loudspeakers that produce 360 degrees of acoustic energy. The high fidelity output remains intelligible over up to a quarter mile from the device. It is rated for indoor or outdoor use. The include four wattage taps: 40 W, 90 W, 125 W, and 250 W.

MN-HSMT25P5N	250-Watt Medium Power Speaker Array, tan housing.	Data Sheet K85001-0652
MN-HSMG25P5N	250-Watt Medium Power Speaker Array, gray housing.	Data Sheet K85001-0652
MN-HSMR25P5N	250-Watt Medium Power Speaker Array, red housing.	Data Sheet K85001-0652



#### **UL Listed HyperSpike LineWave Loudspeakers**

Designed with the latest technology in line array speaker systems, the Kidde HyperSpike® LineWave loudspeaker is optimized to produce clear and authoritative voice commands and powerful tones never before possible within reverberant environments. The beam forming capability of the LineWave loudspeaker allows even coverage across the listening plane while focusing the acoustic pattern away from surfaces that cause unwanted reflections. This technology is essential for achieving optimum levels of speech intelligibility within reverberant spaces. The result is clear and intelligible direct sound that ensures critical messages are heard and understood.

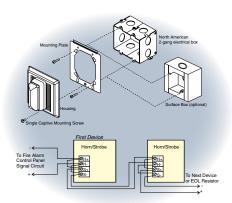
_			
	90243A-801-01-L	LineWave line array speaker 2 Black	Data sheet K85001-0659
	90243A-802-01-L	LineWave line array speaker 4 Black	Data sheet K85001-0659
	90243A-803-01-L	LineWave line array speaker 8 Black	Data sheet K85001-0659
	90243A-804-01-L	LineWave line array speaker 16 Black	Data sheet K85001-0659
	90243A-801-05-L	LineWave line array speaker 2 Red	Data sheet K85001-0659
	90243A-802-05-L	LineWave line array speaker 4 Red	Data sheet K85001-0659
	90243A-803-05-L	LineWave line array speaker 8 Red	Data sheet K85001-0659
	90243A-804-05-L	LineWave line array speaker 16 Red	Data sheet K85001-0659
	90243A-801-06-L	LineWave line array speaker 2 White	Data sheet K85001-0659
	90243A-802-06-L	LineWave line array speaker 4 White	Data sheet K85001-0659
	90243A-803-06-L	LineWave line array speaker 8 White	Data sheet K85001-0659
	90243A-804-06-L	LineWave line array speaker 16 White	Data sheet K85001-0659
	90243A-801-07-L	LineWave line array speaker 2 Gray	Data sheet K85001-0659
	90243A-802-07-L	LineWave line array speaker 4 Gray	Data sheet K85001-0659
	90243A-803-07-L	LineWave line array speaker 8 Gray	Data sheet K85001-0659
	90243A-804-07-L	LineWave line array speaker 16 Gray	Data sheet K85001-0659
	72581B-801	LineWave line array speaker pole mount kit	Data sheet K85001-0659
	72575B-801-L	LineWave 25V/70V/100V Transformer 2/4 speaker	Data sheet K85001-0659
	72542B-801-L	LineWave 25V/70V/100V Transformer 8 speaker	Data sheet K85001-0659
	72542B-802-L	LineWave 25V/70V/100V Transformer 16 speaker	Data sheet K85001-0659



**Enhanced Integrity Series** 

# Harsh Environment Signals

All Enhanced Integrity devices are UL 1971 listed for both wall and ceiling orientation. Enhanced Integrity strobes meet the latest UL1971 synchronization requirements when used with the MG1M Signal Master. Integrity devices are shipped with wall mount style "FIRE" lens markings. Other lens markings are available.





#### **Temporal Horns and Horn-Strobes**

During installation, the Horn is configured for steady or temporal tone signal. When temporal output is selected, all Horns on a common two-wire circuit are self-synchronized. Integrity Series Horns emit a low frequency "growling" tone that demands attention. Horns can be configured for either high output (98 dBA) or low output (94 dBA); and are listed for outdoor use.

☐ INT-T (Red)	☐ INT-TW (White)	Temporal Horn	Data Sheet K85001-0341
☐ INT-7AT (Red)	☐ INT-7ATW (White)	Temporal Horn-Strobe, 15/75cd	Data Sheet K85001-0341
☐ INT-8AT (Red)	☐ INT-8ATW (White)	Temporal Horn-Strobe, 110cd	Data Sheet K85001-0341



#### 4" Square Box Mount Strobes

4MS Series strobes are self-synchronized to flash at one fps across their full operating voltage range. UL 1971 synchronization requirements are achieved when used with the MG1M Signal Master. Strobes must be connected to signal circuits that output a constant (not pulsed) voltage. A diode is used to allow full signal circuit supervision. 4MS Series strobes are suitable for outdoor use and installed to a standard four-inch square electrical box.

☐ 4MS-5AR (Red)	☐ 4MS-5AW (White)	Strobe - 15 cd	Data Sheet K85001-0305
☐ 4MS-7AR (Red)	☐ 4MS-7AW (White)	Strobe - 15/75	Data Sheet K85001-0305
☐ 4MS-3AR (Red)	☐ 4MS-3AW (White)	Strobe - 30 cd	Data Sheet K85001-0305
☐ 4MS-6AR (Red)	☐ 4MS-6AW (White)	Strobe - 60 cd	Data Sheet K85001-0305
☐ 4MS-8AR (Red)	☐ 4MS-8AW (White)	Strobe - 110 cd	Data Sheet K85001-0305
☐ CS405-7A-T (15/75 cd)	☐ CS405-8A-T (110 cd)	Strobe - Weatherproof (red)	Data Sheet K85001-0305



#### Re-Entrant Speakers and Speaker-Strobes

Re-entrant speakers feature a sealed, high efficiency compression driver that's both weatherproof and vermin proof. This makes them ideal for public places and outdoor areas such as parking garages and transport terminals. All Integrity speakers include a DC Blocking Capacitor that permits electrical supervision of the audio distribution circuit. Models for 25VRMs and 70VRMs circuits are available.

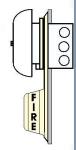
	☐ 757-1A-R25 (Red)	☐ 757-1A-R25W (White)	25 V Re-entrant Speaker	Data Sheet K85001-0317
	☐ INT-7AR2 (Red)	☐ INT-7AR2W (White)	25 V Re-entrant Speaker-Strobe, 15/75cd	Data Sheet K85001-0317
	☐ 757-3A-R70 (Red)	☐ 757-3A-R25W (White)	25 V Re-entrant Speaker-Strobe, 30cd	Data Sheet K85001-0317
	☐ INT-8AR2 (Red)	☐ 757-8A-RS70W (White)	25 V Re-entrant Speaker-Strobe, 110cd	Data Sheet K85001-0317
	☐ INT-R (Red)	☐ 757-1A-R70W (White)	70 V Re-entrant Speaker	Data Sheet K85001-0317
	☐ INT-7AR (Red)	☐ 757-7A-RS70W (White)	75 V Re-entrant Speaker-Strobe, 15/75cd	Data Sheet K85001-0317
	□ 757-3A-R70	☐ INT-3ARW (White)	75 V Re-entrant Speaker-Strobe, 30cd	Data Sheet K85001-0317
Г	☐ INT-8AR (Red)	☐ INT-8ARW (White)	75 V Re-entrant Speaker-Strobe, 110cd	Data Sheet K85001-0317

### **Accessories**

## **Bell/Strobe Plate**

The bell/strobe plate is ideal for renovation and retrofit projects, and new construction. It is equipped with a self-synchronizing strobe and is designed to allow on-site mounting of the 439 series Vibrating Bell, providing instant conversion to Bell/Strobe audible/ visual signal appliances. The strobe is designed for 20 to 24Vdc operation and must be connected to signal circuits which output a constant (not pulsed) voltage. A diode

is used to allow full signal circuit supervision.



SUBMIT

□ 403-5A-R (15 cd) □ 403-7A-R (15/75 cd) □ 403-3A-R (30 cd) □ 403-8A-R (110 cd)

Data Sheet K85001-0441

#### **Genesis Signal Master**

The Signal Master adds enhanced features to Genesis and Integrity strobes and Horn-Strobes. It is a dual-purpose module that provides UL 1971 required precision synchronization for connected Integrity and Genesis strobes, and independent control for connected Genesis Horns over a single pair of wires.





(piggyback) model

Genesis Signal Master - Snap-on (piggyback) Data Sheet K85001-0545 Genesis Signal Master - Remote 1-Gang Mount Data Sheet K85001-0545

#### **Integrity Lens Marking Kits**

Integrity strobes are shipped with wall mount style "FIRE" lens markings. Where ceiling mount, other languages or different lens markings are required, optional LKW and LKC series Lens Marking Kits are available. Lens marking sleeves snap right over the strobe lens providing a quick, easy, change.



LKW-1R (Wall orientation)	"FIRE" (Red)	
☐ LKW-1 (Wall orientation)	☐ LKC-1 (Ceiling orientation)	"FIRE"
☐ LKW-2 (Wall orientation)	☐ LKC-2 (Ceiling orientation)	"FEU"
☐ LKW-3 (Wall orientation)	☐ LKC-3 (Ceiling orientation)	"FIRE/FEU"
☐ LKW-4 (Wall orientation)	☐ LKC-4 (Ceiling orientation)	"SMOKE"
☐ LKW-5 (Wall orientation)	☐ LKC-5 (Ceiling orientation)	"HALON"
☐ LKW-6 (Wall orientation)	☐ LKC-6 (Ceiling orientation)	"CO2"
☐ LKW-7 (Wall orientation)	☐ LKC-7 (Ceiling orientation)	"EMERGENCY"
☐ LKW-8 (Wall orientation)	☐ LKC-8 (Ceiling orientation)	"ALARM"
☐ LKW-9 (Wall orientation)	☐ LKC-9 (Ceiling orientation)	"FUEGO"
☐ LKW-10 (Wall orientation)	☐ LKC-10 (Ceiling orientation)	"ALERT"

#### **Mounting Accessories**

Integrity Temporal Horn, Horn/strobe

☐ 757A-SB Surface Box, Red, Indoor ☐ 757A-SBW Surface Box, White, Indoor □ 757A-WB Weatherproof Box, Red, Surface

☐ 757A-WBW Weatherproof Box, White, Surface

Integrity Speakers, Speaker/strobes

■ 960A-4SF Flush Box, Indoor □ 757A-SB Surface Box, Red, Indoor ☐ 757A-SBW Surface Box, White, Indoor

Integrity Re-entrant speakers, Speaker/strobes

□ 960A-4SF Flush Box, Indoor

☐ 757A-SB Surface Box, Red, Indoor Surface Box, White, Indoor □ 757A-SRW ☐ 757A-WB Weatherproof Box, Red, Surface ☐ 757A-WBW Weatherproof Box, White, Surface Integrity Chimes. Chime/strobes

Surface Box, Red, Indoor ☐ 757A-SB ☐ 757A-SBW Surface Box, White, Indoor

Genesis Signals

**27193-11** Horn-strobe Surface Box, Red, Indoor **27193-16** Horn-strobe Surface Box, White, Indoor ☐ G4RB Speaker Surface Box. Red. Indoor ☐ G4B Speaker Surface Box, White, Indoor ☐ G4ERB G4 Dual-strobe Format Surface box, Red ☐ G4EWB G4 Dual-strobe Format Surface box, White

Horn/siren Combination

Weatherproof Backbox

Fire Alarm Bells and CS-405 Series Weatherproof Backbox



Genesis G4B Speaker Surface Box

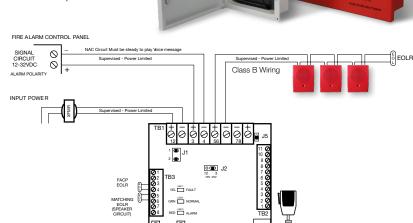


**Audio Notification System** 

See Data Sheet K85001-0587 for complete specifications and ordering information.

The ANS series is a collection of high-performance audio notification systems that provide voice evacuation capability which meets the emergency voice alarm requirements of NFPA 72 for UL listed fire alarm applications. ANS panels are available in 25, 50, or 100 Watt models and include a microphone, amplifier, tone generator, digital message repeater (DMR), and supervisory interface. Additionally, the 25 and 100Watt amplifiers are 520 Hz compliant.

These self-contained systems offer robust field-configurable features and are supported by a wide range of accessory equipment that provides application flexibility and reliable performance for new and retrofit installations alike. Expander panels and modules extend the range of the ANS system to meet the needs of demanding audio applications. Accessory equipment such as zone switchers and remote microphones offer the sophistication of high-end systems for a relatively low cost. 25W and 100W models may now be used in sleeping areas and are compliant with UL464



#### **Audio Notification Panels**

Panels include DMR, Power Supply & Battery Charger, Standard Message, Microphone, and Cabinet.

☐ ANS25MDG2 (Grey Cabinet)	☐ ANS25MDG2 (Red Cabinet)	25 Watt Audio Notification Panel.
☐ ANS50MDG2 (Grey Cabinet)	☐ ANS50MDG2 (Red Cabinet)	50 Watt Audio Notification Panel.
☐ ANS100MDG2 (Grey Cabinet)	☐ ANS100MDG2 (Red Cabinet)	100 Watt Audio Notification Panel.

#### **Audio Expander Panels**

☐ ANS25XG (Grey Cabinet)	☐ ANS25XR (Red Cabinet)	25 Watt Audio Expander Panel.
☐ ANS50XG (Grey Cabinet)	☐ ANS50XR (Red Cabinet)	50 Watt Audio Expander Panel.
☐ ANS100XG (Grev Cabinet)	☐ ANS100XR (Red Cabinet)	100 Watt Audio Expander Panel

#### Audio Notification System Accessories

Audio Notification	System Accessories
ANSZM4B2A	Zone Module. 4 Class B or 2 Class A circuits.
ANSREMG	Remote microphone. Requires ANSREMSUP card in ANS panel. Gray cabinet. Supervised.
ANSREMR	Remote microphone. Requires ANSREMSUP card in ANS panel. Red cabinet. Supervised.
ANSREMSUP	Remote microphone supervisory card, one per system. Supervises up to 5 remote microphones.
ANSBKUP	Backup amplifier switching module.
ANS100A	100 Watt expander module.
ANS100AMD2	100 Watt audio notification module with DMR and microphone.
ANS25A	25 Watt expander module.
ANS25AMD2	25 Watt audio notification module with DMR and microphone.
ANS50A	50 Watt expander module.
ANS50AMD2	50 Watt audio notification module with DMR and microphone.
ANSDC8	8 dry-contact input/LED module.
ANSSW8	8 position switch/LED module.
ANSXM8	8 transistor output/LED module.
ANSDMRALT	Alternate prerecorded DMR message PROM from library.

Initiating Devices p. 38

Notification Appliances p. 39



# Hazardous Location Devices

Kidde hazardous location devices provide reliable life safety protection and emergency signaling in areas where atmospheres could become harsh or explosive. All hazardous location devices are UL rated under the full range of classifications set out in the National Electrical Code.

The following classification definitions are an interpretive summary based on the 1996 edition of the National Electrical Code (NEC, NFPA 70). Refer to the latest editions of NFPA 497M, NFPA 70 and the UL Hazardous Location Equipment Directory for current and more detailed information. For more information on NEMA classifications, refer to NEMA Standards Publication No. 250.

#### **Hazardous Location Classifications**

#### **Classes**

**Class I - Hazardous Gases.** Class I locations are areas in which flammable gases or vapors are or may be present in the air in quantities sufficient to produce explosive or ignitable mixtures.

#### Typical Class I Hazardous Areas

- Spray painting and finishing areas
- Utility gas plants
- Petroleum refining production plants
- Petroleum dispensing locations
- Dry cleaning facilities
- Dip tanks containing combustibles or flammable liquids
- Plant facilities extracting solvents
- Inhalation anesthetics areas
- Process facilities manufacturing pyroxylin type plastics

**Class II - Hazardous Dusts.** Class II locations represent areas that are hazardous due to the presence of combustible dust.

#### Typical Class II Hazardous Areas

- Flour mills
- Feed mills
- Grain elevators and grain handling facilities
- Aluminum manufacturing and storage areas
- Magnesium manufacturing and storage areas
- Coal preparation and handling facilities
- Starch manufacturing and storage areas
- Confectionery plants
- Pulverizer sugar and cocoa manufacturing, and storage plants
- Spice grinding and storage plants

**Class III - Hazardous Fibers.** Class III locations have easily ignitable fibers or flyings present, but not likely to be suspended in air in quantities sufficient to produce ignitable mixtures in the atmosphere.

#### Typical Class III Hazardous Areas

- Textile mills
- Woodworking plants\*
- Furniture manufacturers\*
- Cotton gins
- · Cotton seed milling plants
- Flax plants
- Carpet manufacturers
  - \* Except if wood flour (dust), which is Class II Group G, is present

#### **Divisions**

The Location Classes are broken down by the NFPA into Divisions 1 and 2, defining different levels of risk. In general, the risk of there being a hazardous presence of flammable/combustible/ignitable materials is higher for Division 1 than for Division 2. The specifics differ between the three classes (I, II and III). Equipment suitable for Division 1 is also suitable for Division 2 locations.

#### Groups

Class I and II locations are divided by the NFPA into Group designations identifying specific gases, vapors and dusts by characteristic similarities that relate to specific equipment construction requirements. Class III locations are not divided into separate group designations.

#### Class I Groups

Group A. Atmospheres containing acetylene.

Group B. Atmospheres containing hydrogen, fuel and combustible process gases containing more than 30 percent hydrogen by volume, or gases or vapors of equivalent hazard such as butadiene, ethylene oxide, propylene oxide, and acrolein

**Group C.** Atmospheres such as ethyl ether, ethylene, or other gases or vapors of equivalent hazard.

Group D. Atmospheres containing acetone, ammonia, benzene, butane, cyclopropane, ethanol, gasoline, hexane, methanol, methane, natural gas, naphtha (petroleum), propane, or gases or vapors of equivalent hazard.

#### Class II Groups

Group E. Atmospheres containing combustible metal dusts, including aluminum, magnesium, and their commercial alloys, or other combustible dusts whose particle size, abrasiveness and conductivity present similar hazards in the use of electrical equipment.

Group F. Atmospheres containing combustible carbonaceous dusts, including carbon black, charcoal, coal, or dusts that have been sensitized by other materials so that they present an explosion hazard.

**Group G.** Atmospheres containing combustible dusts not included in Group E or F, including flour, grain, wood, plastic, and chemicals.



## **Initiating Devices**

#### **Rate Compensation Heat Detectors**



Series 302 heat detectors are designed for use in normal environments as well as environments where the detectors are subject to weather, moisture (internal condensation), and explosive atmospheres. They are normally-open devices designed to close an electrical circuit upon activation. All models feature rate compensation and are available with either 135 °F (57.2 °C) or 194 °F (90 °C) ratings. They are self restoring, hermetically sealed, shock and corrosion resistant, and are tamperproof.

Sensor's Rated Temperature	Minimum Ambient Air Temperature	Maximum Ceiling Temperature
135 °F (57.2 °C)	-40 °F (-40 °C)	100 °F (38 °C)
194 °F (90 °C)	-40 °F (-40 °C)	150 °F (66 °C)

The sensor's aluminum tube acts as a heat collector when sources of heat radiate directly on the tube. Install these sensors out of direct sunlight and away from radiating heat sources including the direct flow from heaters and heat ducts.

302-AW-135	All-weather Heat Detector - Vertical Mounting FM & UL, 135 °F (57.2 °C)	Data Sheet: K85001-0589
302-AW-194	All-weather Heat Detector - Vertical Mounting FM & UL, 194°F (90 °C)	Data Sheet: K85001-0589
302-ET-135	All-weather Heat Detector - Vertical, Box Mount (1/2" NPT), FM & UL, 135 °F (57.2 °C)	Data Sheet: K85001-0589
302-ET-194	All-weather Heat Detector - Vertical, Box Mount (1/2" NPT), FM & UL, 194°F (90 °C)	Data Sheet: K85001-0589
302-EPM-135	Heat Detector - Explosionproof Mounting UL (Not FM approved), 135 °F (57.2 °C)	Data Sheet: K85001-0589
302-EPM-194	Heat Detector - Explosionproof Mounting UL (not FM approved), 194°F (90 °C)	Data Sheet: K85001-0589
AP-PAdaptor	plate for mounting 302 and 302-AW to any 3" box or 4" octagon outlet box	Data Sheet: K85001-0589
JALX11Explos	ion proof outlet body with cover - Killark	Data Sheet: K85001-0589

#### **Explosionproof/weatherproof Manual Stations**

MPSR Series explosionproof/weatherproof manual pull stations are noncoded fire alarm stations solidly constructed of die-cast material. They are rated for Class I Group B (hydrogen) C & D, Class II Groups E. F, G, Class III environments, and are rated NEMA 4X for outdoor use. Key and screw reset models feature terminal connections and come complete with backbox.



▼ Hex Screw Reset	▼ Cat 45 Key Reset	Manual Stations	Data Sheet: K85001-0588
☐ MPSR1-DHTWX-GE	☐ MPSR1-D45WX-GE	Explosionproof Single-action, SPST with	backbox.
☐ MPSR1-SHTW-GE	☐ MPSR1-S45W-GE	Weatherproof Single-action, SPST with b	oac box.
☐ MPSR1-DHTW-GE	☐ MPSR1-D45W-GE	Weatherproof Single-action, DPDT with I	oackbox.
☐ MPSR2-SHTW-GE	☐ MPSR2-S45W-GE	Weatherproof Double-action, SPST with	backbox.
☐ MPSR2-DHTW-GE	☐ MPSR2-D45W-GE	Weatherproof Double-action, DPDT with	backbox.
☐ MPSR2-SHTW-GE-NYW	☐ MPSR2-S45W-GE-NYW	Weatherproof Double-action, SPST with	backbox, NYC white stripe.

For French markings add -F to the suffix of the model number. For bilinguial French/English markings add -B to the suffix of the model number.

MPSR-LP	Double action cover for explosionproof manual stations
MPSRGR10	Replacement glass rods for MPSR stations (10 pack).
276-K1	Cat 45 Key (each)

#### **Explosionproof Smoke Detector**

Model 30-3013 detectors are high performance smoke detectors built for use in hazardous locations. They are corrosion-resistant and feature a non-conducting aluminum alloy retaining ring that protects the detector sensor against the effects of explosions and other catastrophic events. The retaining ring mounts securely to a companion junction box, which offers several common port configurations for conduit connection. Together, the ring and box provide a sturdy protective shell for the detector head.

30-3013A1N12F **Explosionproof Smoke Detector** Data Sheet K85001-0645

## **Notification Appliances**

#### **Hazardous Location Strobes**

· Class I, II, or III locations

116DEGEX-FJ hazardous location strobes are life safety signaling appliances designed for installation in hazardous environments. State-of-the-art technology provide for high visual output and low maintenance. The 116DEGEX-FJ has negligible in-rush current. When pendant, wall or ceiling mounted, the 116DEGEX-FJ meets or exceeds the requirements of UL 1971 Signaling Appliance for the Hearing Impaired.

116DEGEX-FJ	Explosionproof Strobe, Diode Polarized	Data Sheet K85001-0624
116EX-B	Wall breaket mounting albour (required for wall mount applications)	Data Sheet K85001-0624
I IOEA-D	Wall bracket mounting elbow (required for wall mount applications)	Data Sileet R65001-0024
116EX-C	Ceiling/wall mounting module (required for wall mount applications)	Data Sheet K85001-0624
TIOEX	Colling/ Wall Modriting Modale (required for Wall Modrit applications)	Data Officet Noodo 1 0024
116EX-P	Pendant mounting module - 3/4" (19 mm) NPT	Data Sheet K85001-0624
110211	· original in a discourse of the control of the con	2 dia 0.1001 1 00001 002 1
116-GRD	Lens Guard	Data Sheet K85001-0624

#### **Hazardous Location Bells**

- Class I groups B, C and D locations
- Class III hazardous locations, for Divisions 1 and 2
- Class II groups E, F and G locations

430D series of hazardous location bells are diode-polarized, heavy duty fire bells for use in life safety applications where a diode supervised signal is required. They can be mounted to any solid surface using two 3/8 inch (10 mm) bolts and the supplied mounting brackets or to a rigid conduit. The integral explosion-proof housing is mechanically terminated to accept a standard 3/4 inch -14 National Pipe Taper (NPT) nipple.

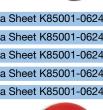
☐ 439DEX-6AW (6")	☐ 439DEX-8AW (8")	☐ 439DEX-10AW (10")	Bell – 24 Vdc, Red	Data Sheet K85001-0399
☐ 439DEX-6AW-R (6")	☐ 439DEX-8AW-R (8")	☐ 439DEX-10AW-R (10")	Bell - 24 Vdc. Grev	Data Sheet K85001-0399

#### **Hazardous Location Horns**

- Class I groups B, C and D locations
- Class III hazardous locations, for Divisions 1 and 2
- Class II groups E, F and G locations

888D and 889D hazardous location horns are diode-polarized, heavy duty, high decibel vibrating horns intended for use in life safety systems in hazardous (classified) locations. These horns may be mounted to any solid surface using two bolts. Each unit is supplied with a sealing fitting for a 3/4 inch -14 National Pipe Taper (NPT) nipple, and wire leads for the electrical connection to the life safety system notification appliance circuit.

□ 888D-N5 (120 Vac) ☐ 74339U (24 Vdc) Horn - 120 Vac Data Sheet K85001-0397







### **Door Holders**



24 Vac 60 Hz 24 Vdc 120 Vac 60 Hz

#### **Electromagnetic Door Holders**

Electromagnetic door holders keep doors open until signaled by the fire alarm system, a heat detector, a smoke detector, or an electrical switch. Door holders should be installed wherever doors may be effectively used to confine smoke and fire, or where the release of a self-closing door from a remote location is required. Fail-safe operation is an inherent feature of these door holders. If power fails, doors are released automatically, but may be opened or closed manually at any time. All units are free of moving parts, are self-contained, and require no maintenance. Door holders have a holding force of approximately 15-25 Lbf (66-111N).

☐1501-AQN5 (Single Door)	□1502-AQN5 (Double Door)	Floor Mounted	Data Sheet K85001-0421
□1504-AQN5 (Long Catch Plate)	□1505-AQN5 (Short Catch Plate)	Flush Wall Mounted	Data Sheet K85001-0421
□1508-AQN5 (Surface)	□1505-AQN9 (Completely flush)	Wall Mounted	Data Sheet K85001-0421
□1500-1 (1.5" Extension)	□1500-2 (2.5" Extension)	Catch Plate	Data Sheet K85001-0421
□1500-7 (5.25 to 7.5" Extension)	□1500-12 (7.5 to 12" Extension)	Catch Plate	Data Sheet K85001-0421
□CS2595-5 (short)	□CS2598-5 (long)	Replacement Armature	Data Sheet K85001-0421

## Relays



#### Four-Voltage SPDT/DPDT Control Relays

MR Series multi-voltage control relays are ideal for applications where local contacts are required for system status, remote contacts, or for control of electrical loads and general purpose switching. They are suitable for use with HVAC temperature control, fire alarm, security, energy management, and lighting control systems. Relays provide 10-Amp contacts, which may be operated by one of four input control voltages. Each relay position contains a red LED that indicates the relay coil is energized. Relays may be snapped apart from a standard four-module assembly and used independently.

☐MR101/T (with mounting hardware)	☐MR101/C (in metal enclosure)	Single SPDT relay	Data Sheet K85300-02762
☐MR104/T (with mounting hardware)	☐MR104/C (in metal enclosure)	4-position SPDT relay	Data Sheet K85300-02762
☐MR201/T (with mounting hardware)	☐MR201/C (in metal enclosure)	Single DPDT relay	Data Sheet K85300-02762
☐MR204/T (with mounting hardware)	☐MR204/C (in metal enclosure)	4-position DPDT relay	Data Sheet K85300-02762



#### **Heavy Duty DPDT Power Relays**

MR-199 heavy duty power relays are designed for control applications where 30-Amp DPDT contacts are required. Two models are available: a 115Vac coil and a 24Vdc coil, each of which may be mounted in a rugged steel enclosure.

☐MR199X13 (relay only)	☐MR199X13/C (in metal enclosure)	Power Relay — 24 VDC	Data Sheet K85300-02766
☐MR199X14 (relay only)	☐MR199X14/C (in metal enclosure)	Power Relay — 120 VDC	Data Sheet K85300-02766

SUBMIT



### SPDT Relays

Single-pull/double-throw relays are ideal for applications where local or remote contacts are required for control of electrical loads. They are suitable for use with HVAC, temperature control, fire alarm, security, energy management, and lighting control systems. Each relay position contains a high-intensity LED which, when illuminated, indicates the relay coil is energized. Individual relay circuits may be snapped apart from standard four- or eight-position modules, and are also available in a single-circuit configuration. The common power to each relay position is bussed on the printed wiring board, which permits power to be connected only once per multi-position module.



#### Single-Voltage Manual Override Relays

MR-600 series relays provide SPDT, 10-Amp contacts with manual override capability by means of an ON-AUTO-OFF switch. The relay requires a 24Vac or 24Vdc power source supplied by the controlling system. With the switch in the ON position the power relay is energized. With the switch in the AUTO position the relay is allowed to operate as signaled by the controlling system. With the switch in the OFF position the relay cannot be energized.

□MR601/T (with mounting track)	Data Sheet K85300-02761
☐MR604/T (with mounting track)	Data Sheet K85300-02761
Livinout i (with modifiing track)	Data Officet Noodoo 02701
☐MR-608/T (with mounting track)	Data Sheet K85300-02761
Livin-000/ I (with mounting track)	Data Sheet Rossou-02701

#### Three-Voltage Control Relays

MR-800 Series relays provide SPDT 10-Amp contacts that may be operated by one of three input control voltages: 24Vdc, 24Vac or 115Vac.

☐MR801/T (with mounting track)	☐MR801/S (with mounting spacers) Single SPDT relay	Data Sheet K85300-02763	
☐MR804/T (with mounting track)		Data Sheet K85300-02763	$\Box$
☐MR808/T (with mounting track)		Data Sheet K85300-02763	Ħ

#### **Four-Voltage Control Relays**

MR-700 Series relays provide SPDT 10-Amp contacts that may be operated by one of four input control voltages: 12Vdc, 12Vac, 24Vdc, or 24Vac.

☐MR701/T (with mounting track)	☐MR701/S (with mounting spacers) Single SPDT relay	Data Sheet K85300-02764
☐MR704/T (with mounting track)		Data Sheet K85300-02764
☐MR708/T (with mounting track)		Data Sheet K85300-02764



#### Three-Voltage Encapsulated Control Relays

PAM1 relays provide 10-Amp Form C contacts. The relay may be energized by one of three input voltages: 24Vac, 24Vdc, or 115Vac. The PAM1 may be mounted with double-sided adhesive tape, a self-tapping screw, or loosely placed in a backbox.

PAM1 Encapsulated SPDT relay	Data Sheet K85300-02766
------------------------------	-------------------------

## Value, efficiency, and a legacy of fire protection innovation

When building owners and designers do business with Kidde, their investment is underwritten by a 100-year history of dedication to the fire alarm industry. That's why today architects and engineers agree that when it comes to protecting people and property, Kidde life safety systems remain the technology of choice.

Our strength is in our dealer network — the people and organizations we entrust with the technology that has charted the course of detection and alarm for decades. Kidde Engineered Systems Dealers are independent contractors who add value to the Kidde life safety solution. They enjoy exclusive access to products, custom design innovations, and factory training — and they are adept at ensuring that each proposal is strong and competitive.

These strengths set Kidde installations apart, and have earned this brand a special place among life safety solutions available today.

#### See what's possible now.

Contact your Authorized Kidde Engineered Systems Dealer today.





#### Technology that saves lives

Contact us

Phone: 888.244.9979 (Option 4)
Email: kidde.fire@carrier.com
Web: kidde-esfire.com

8985 Town Center Pkwy,
Bradenton, FL 34202

©2021 Carrier
All Rights Reserved.

