

# Waterflow Alarm Submittal Booklet For MONROE PUBLIC LIBRARY WATERFLOW MONITORING SYSTEM

380 South 5th St Monroe, OR

2G CONSTRUCTION PO Box 11735 Eugene, OR

# **Convergint Technologies LLC**

16575 SW 72nd Avenue Portland, Oregon 97224 Phone: 503.228-8522 FAX: 503.228-8521

Convergint Technologies Project #302-FN-B237

Project Manager

Ben Juarez

Project Engineer
Bryan Duffel

**September 11, 2012** 

Proprietary document for approval only



# MONROE PUBLIC LIBRARY WATERFLOW MONITORING SYSTEM

# Waterflow Alarm Submittal Booklet

Item	Part #	Manufacturer	Description
1	5700	Silent Knight	System Control Panel
2	5860R	Silent Knight	Remote Annunciator
3	SK-RELAY	Silent Knight	Addressable Relay Module
4	SK-MONITOR	Silent Knight	Addressable Single Input Module
5	SK-MONITOR-2	Silent Knight	Addressable Dual Input Module
6	SK-PHOTO	Silent Knight	Addressable Photoelectric Smoke Detector
7	SK-PULL-DA	Silent Knight	Addressable Pull Station
8	43T-G10-24-R	Wheelock	24V Waterflow Bell, 10"
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			

<sup>\* -</sup> Catalog Cut Sheets not available



# IntelliKnight® Model 5700 Single Loop Addressable Fire Alarm Control System

# The affordable addressable fire alarm control panel solution.

IntelliKnight Model 5700 is a class leading single loop addressable fire alarm control/communicator system. 5700 provides you with the revolutionary value and performance of addressable sensing technology combined with exclusive, built-in digital communication, distributed intelligent power, that includes an easy to use interface. Powerful features such as drift compensation and maintenance alert are delivered in this powerful FACP from Silent Knight.

For more information about the IntelliKnight system, or to locate your nearest source, please call 1-800-328-0103.

# **Description**

The basic IntelliKnight 5700 system can be enhanced by adding modules such as 5860 remote annunciator, 5824 serial/parallel printer interface module (for printing system reports), and 5496 intelligent power module. 5700 supports Hochiki or SK devices. 5700 also features a powerful built-in dual line fire communicator that allows for reporting of all system activity to a remote monitoring location.

# **Features**

- Built-in support for up to 50 SK detectors and 50 SK modules creating a total point capacity of 100 points.
- Built in support for up to 50 Hochiki devices
- Up to 125 zones and 125 output groups
- Uses standard wire—no shielded or twisted pair required
- · Built-in digital communicator.
- · Central station reporting by point or by zone
- Supports Class B (Style 4) and Class A (Style 6 or 7) configuration for SLC
- · Drift compensation
- 13 pre-programmed output cadences (including ANSI-3.41) and 4 programmable outputs
- Notification circuits configurable as 1 Class A (Style Z) or 2 Class B (Style Y), or auxiliary power for resettable, constant, or door holder power
- Built-in synchronization for AMSECO, Gentex<sup>®</sup>,
   Faraday, System Sensor<sup>®</sup> and Wheelock<sup>®</sup> appliances
- · Built-in annunciator with 80-character LCD display
- RS-485 bus provides communication to system accessories
- Upload or download programming, event history, or detector status onsite or from a remote location using a PC and 5660 Silent Knight Software Suite (SKSS)
- Two built-in Form C programmable relays rated at 2.5A at 27.4 VDC



**Model 5700** 

- Improvements in SKSS deliver five times faster upload/downloads
- Built-in RS-232 interface for programming via PC
- Built-in Form C trouble relay rated at 2.5A at 27.4 VDC
- Programmable date setting for Daylight Saving Time

### Installation

The 5700 is a surface mount FACP.

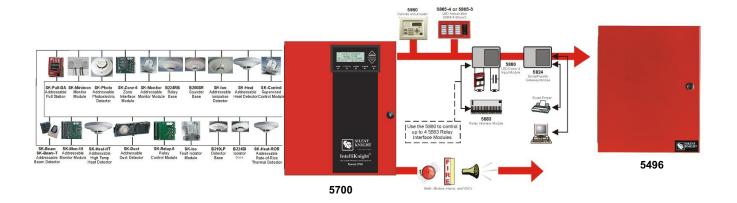
# Compatibility

The 5700 SLC supports multiple device types of the *same* protocol:

- SK (System Sensor)
- · Hochiki

You cannot mix Hochiki and SK devices on a FACP.

# **Model 5700 Fire Alarm Control Panel**



# **Specifications**

### **Electrical**

Primary AC: 120 VAC, 60 Hz, 1.5A Total Accessory Load: 2.5A @ 27.4 VDC Notification Power: 2.5A @ 27.4 VDC, power-limited

Standby Current: 200 mA Alarm Current: 325 mA Notification/Aux Power Circuits: 2.5A @ 27.4 VDC per circuit,

power-limited

Battery Charging Capacity: 7.0-35.0 AH Battery Size: 7 AH max. allowed in FACP cabinet. Larger capacity batteries can be housed in an RBB accessory cabinet.

### **Physical**

Dimensions:

12.75" W x 15.2" H x 3.4" D (32.39 W x 38.42 H x 8.57 D cm) Weight: 11.5 lbs. (5.2 kg)

Color: Red

Telephone Requirements:

FCC Part 15 and Part 68 approved Type of Jack: RJ31X (two required)

# **Approvals**

NFPA 13, NFPA 15, NFPA 16, NFPA 70, & NFPA 72: Central Station; Remote Signalling, Local Protective Signalling Systems; Auxiliary Protected Premises Unit; & Water Deluge Releasing Service. Suitable for automatic, manual, waterflow, sprinkler supervisory (DACT non-coded) signalling services.

Other Approvals: UL Listed;

CSFM 7170-0559: 144; MEA 429-92-E Vol. XVI.

# S-BUS Accessories

### 5860/R Remote Fire Annunciator

Features the same 80 character backlit LCD display keypad and firefighter's key switch as the 5700. The system can be fully programmed and operated from any 5860. 5860 is gray and 5860R is red.

### 5496 Intelligent Power Module

A 6 amp notification power expander that provides four additional power-limited notification appliance circuit outputs.

# 5880 LED/IO Module

Features 40 LED outputs, 8 normally open dry contact inputs and one piezo output.

### 5865-3 and 5865-4 Remote LED Annunciator

Features 30 Programmable LED (15 red and 15 yellow) outputs and a piezo sounder. The 5865-4 adds a silence and reset switch to the package.

### 5883 Relay Board

Features 10 general purpose Form C relays. Used with 5880 module.

### 5824 Serial/Parallel Printer **Interface Module**

Provides one parallel and one RS-232 serial port for connecting a printer to 5808. Use to print a real-time log of system events, detector status reports, and event history. Interfaces with building control system.

# Miscellaneous Accessories

### 5660 Silent Knight Software Suite

User-friendly Windows software for remote programming of 5700s using a PC. Upload and view panel account information, event history, and detector status.

### 5670 Silent Knight Software Suite

End-user facility management software allows viewing of detector status and event history via modem or direct connection.

### **RBB**

Remote Battery Box Accessory Cabinet. Use if backup batteries are too large to fit into FACP cabinet. Dimensions:

16" W x 10" H x 6" D

(406 mm W x 254 mm H x 152 mm D)

### SD505-DTS-K

Remote test switch that provides remote key operated test function and annunciation of detector alarm with SD505-DUCTR.

### Hochiki and SK Devices

See the specification sheets listed below for a complete listing of the Hochiki and SK devices.

53624

Hochiki Devices Specification

Sheet

SK Protocol Devices Specification 53623

Sheet



This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact Silent Knight 12 Clintonville Road, Northford, CT 06472-1610 Phone: (800) 328-0103 or (203) 484-7161, Fax: (203) 484-7118. www.silentknight.com

MADE IN AMERICA

P/N 350392 Rev G1 © 2010 Honeywell International Inc.

# **5860 Remote Annunciator**





# Bring the power to control an IntelliKnight fire alarm control panel to every area within your facility.

Now you can operate and program your IntelliKnight system from up to eight locations throughout your facility. The 5860 remote annunciator provides the same advanced, easy-to-use interface found on the IntelliKnight panel's built-in annunciator. The 80-character display and

ergonomically designed keypad allow for simple and error-free system operation. All operations—including reset, silence, detector status checking, fire drill, and programming—are identical.

Access to the system is through a firefighter's key or an access code. For security, a special installation code is needed for programming functions. The 5860 connects to the IntelliKnight panel via the RS-485 system bus. Wire runs can be up to 6000 feet from the panel.

For more information about the IntelliKnight system, or to locate your nearest source, please call 1-800-446-6444, or in Minnesota, call 763-493-6435.

### **Description**

Features include an 80-character backlit LCD providing easy-to-understand system messages. The annunciator is ergonomically designed with over-sized buttons for the most frequently used features, like Reset and Silence. In addition to status messages displayed on the LCD, there are five LEDs for alarm, supervisory, trouble, silence, and AC power status.

The annunciator is available in gray to match virtually any decor and red for applications where the annunciator must stand out. The annunciator enclosure can be surface or flush mounted. A trim ring kit is available for surface mounting.

# **Features**

- 80-character backlit LCD display (4 lines with 20 characters on each line)
- Tactile and audible feedback
- Accepts user codes or fire fighter's key
- Larger keypad buttons for system reset and silence
- Install up to eight 5860s per FACP

- Available in red or light gray
- Support for simultaneous use of multiple 5860s
- · RS-485 interface to panel
- Operation and appearance is identical to 5860 built-in annunciator
- On-board piezo sounder audibly indicates alarms, troubles, and supervisories
- Five status LEDs for alarm, supervisory, trouble, silence and AC power conditions
- Wiring lengths up to 6000 ft. from the FACP (depending on wire gauge and number of devices on SBUS)
- UL listed, complies with NFPA 72
- · CSFM approved

# **Electrical Specifications**

Operating Voltage: 24 VDC

Standby Current: 20 mA max

Alarm Current: 25 mA

Wiring Distance: 6,000 max. from FACP (depending on wire gauge and number of devices on the SBUS)

Max Per System: 8

### **Mechanical Specifications**

Physical 9.1" W x 7.4" H x 1.5" D (23.1 W x 18.8 H x 3.8 D cm) Shipping Weight: 2.8 lbs (1.3 kg)



5860

Color

5860R: Red 5860: Gray

### **Environmental**

Operating Temperature: 32°F –

120°F (0°C – 49°C)

Humidity: 10% - 93% non-

condensing

# **Approvals**

NFPA 72; UL Listed; CSFM 7170-0559: 135; MEA 429-92-E Vol. IX;

FM Approved



# **5860 Remote Annunciator**



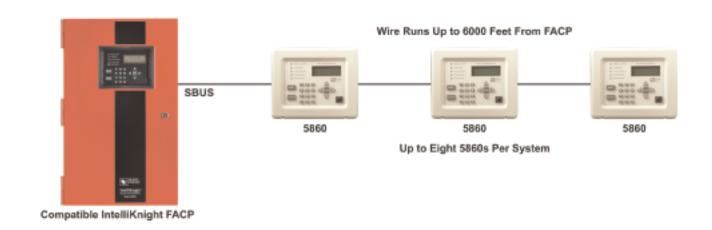
# **Engineering Specifications**

The main control must have a built-in annunciator and must support up to eight remote annunciators. Remote annunciators shall have the same control and display layout so as to match the appearance of the built-in annunciator. Remote annunciators shall be available in two colors, red or light gray.

Remote annunciators shall have identical functionality and operation as the built-in annunciator. All annunciators must have an 80-character LCD display and must feature five LEDs for: General Alarm, Supervisory, System Trouble, System Silence, and System Power.

All controls and programming keys are silicone mechanical type with tactile and audible feedback. Keys have a travel of .040 inches. No membrane style buttons will be permissible.

The annunciator must be able to silence and reset alarms through the use of a code entered on the annunciator keypad or by using a firefighter's key. The annunciator must have two levels of user codes that will limit the operating system programming to authorized individuals. The control panel must allow all annunciators to accommodate multiple user input simultaneously.



# Compatibility

IntelliKnight 5820XL FACP
IntelliKnight 5808 FACP
IntelliKnight 5700 FACP

# Ordering Information

**5680R Remote Annunciator**Four line LCD annunciator with 20 characters per line. Red.

**5680 Remote Annunciator.** Four line LCD annunciator with 20 characters per line. Gray.

**Accessories** 

**5860TR Red Trim Ring** For surface mounting.

**5860TG Gray Trim Ring** For surface mounting.



This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact Silent Knight 7550 Meridian Circle Suite 100, Maple Grove, MN 55369-4927. Phone: (800) 328-0103, Fax: (763) 493-6475.

MADE IN AMERICA

FORM# 350224 Rev C, 05/06

© 2007 Honeywell International Inc.

# **SK-Relay**





# **Intelligent Relay Module**

The SK-Relay Module is intended for use in intelligent, two-wire systems where the individual address of each module is selected using the built in rotary switches.

For more information about the Intelliknight system, or to locate you nearest source, please call 800-328-0103 or in Connecticut, call (203) 484-7161.

# **Description**

The SK-Relay is an addressable relay module for use with Silent Knight IntelliKnight series fire alarm control panels (FACPs).

The SK-Relay allows a Silent Knight FACP to switch discrete contacts by code command. The relay contains two isolated sets of Form C contacts, which operate as a DPDT switch. No supervision is provided for the notification appliance circuit.

The SK-Relay contacts can be used for virtually any normally open or normally closed application. Each SK-Relay is programmed with a unique signaling line circuit (SLC) loop address. When an event occurs that controls the SK-Relay, the relay is triggered by the FACP.

# **Features**

- · Two sets of Form C contacts
- · Rotary address switches for fast installation
- Contacts are rated for a variety of amps (see Specifications)
- Panel controlled status LED that flashes green in normal state and is solid red in alarm
- Relay programming is completely flexible—can be mapped to zone conditions
- · Polling LED visible through the cover plate
- · Attractive ivory cover plate
- · SEMS screws for easy wiring
- UL Listed



SK-Relay

# Installation

The SK-Relay mounts directly into a 4" square electrical box. The box must have a minimum depth of 2-1/8". A surface mount electrical box (System Sensor® PN SMB500) is available from Silent Knight

# Compatibility

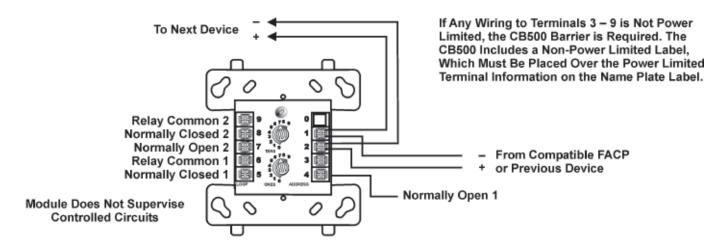
The SK-Relay is compatible with the following IntelliKnight FACP's:

5700 5808 5820XL



# Model SK-Relay





Wiring the SK-Relay Module

# **Specifications**

# **Physical**

Height: 4.65" Width: 4.25"

Depth: 1.1"

Shipping Weight: 6.3 oz (196 g)

### **Electrical**

Operating Voltage: 15 – 32 VDC Current Draw: 6.5 mA max (LED on)

**Operating Current:** 

230  $\mu$ A (LED flashing) direct poll 255  $\mu$ A (LED flashing) group poll

End-of-Line Resistance: not used

Standby Current: 300  $\mu A$  max @ 24 VDC (one communication every 5 sec with LED enabled)

LED Current: 5.5 mA (with LED latched on)

SLC Loop Resistance:  $40\Omega$  max.

# **Relay Contact Ratings**

3.0A @ 30 VDC resistive

0.9A @ 110 VDC resistive

0.9A @ 125 VAC resistive

0.5A @ 125 VAC inductive (PF = .35)

0.7A @ 75 VAC inductive (PF = .35)



This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact Silent Knight 12 Clintonville Road, Northford, CT 06472-1610 Phone: (800) 328-0103, Fax: (203) 484-7118. www.silentknight.com

**MADE IN AMERICA** 

FORM# 350127 Rev A © 2009 Honeywell International Inc.



# **SK-Monitor**

# **Intelligent Monitor Module**

The SK-Monitor module provides an interface to contact devices, such as security contacts, waterflow switches, or pull stations.

For more information about the IntelliKnight system, or to locate you nearest source, please call 1-800-328-0103.

# **Description**

The SK-Monitor is an addressable monitor module for use with Silent Knight IntelliKnight series fire alarm control panels (FACPs). The SK-Monitor is intended for use in intelligent, two-wire systems, where individual address of each module is selected using the built-in rotary switches.

The SK-Monitor supports Class A supervised or Class B supervised wiring to the load device. Conventional 4-wire smoke detectors can be monitored for alarm and trouble conditions.

# **Features**

- · Single contact monitor
- · Support for Class A and Class B wiring
- · Fully supervised
- Panel controlled status LED that flashes green in normal state and is solid red in alarm
- Attractive ivory cover plate
- Rotary address switches for fast installation
- · SEMS screws for easy wiring
- UL Listed

# Installation

The SK-Monitor mounts directly into a 4" square electrical box. The box must have a minimum depth of 2-1/8". A surface mount electrical box (System Sensor<sup>®</sup> PN SMB500) is available from Silent Knight.

# Compatibility

The SK-Monitor is compatible with the following IntelliKnight FACP's:

5700 5808 5820XL



**SK-Monitor** 

# **Specifications**

### **Physical**

Height: 4.5" (11.4 cm) Width: 4" (10.2 cm) Depth: 1.25" (3 cm)

Shipping Weight: 6.3 oz (196 g)

### **Electrical**

Operating Voltage: 15 – 32 VDC

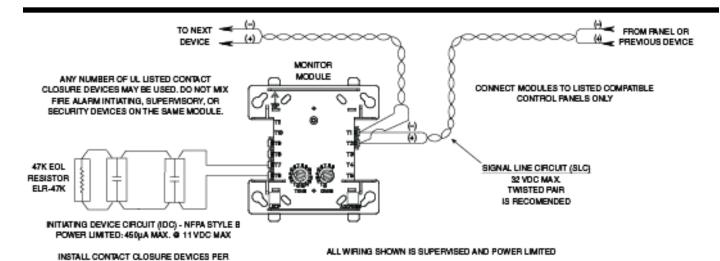
Current Draw (LED on): 5.0 mA max

Operating Current (LED flashing): 375 µA

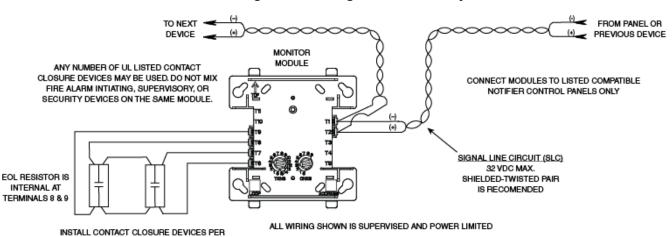
# **Model SK-Monitor**

# Intelligent Monitor Module

MANUFACTURER'S INSTALLATION INSTRUCTIONS.



2-Wire Initiating Circuit Configuration, NFPA Style B



# 4-Wire Initiating Circuit Configuration, NFPA Style D

# **Standby Current:**

400  $\mu\text{A}$  max @ 24 VDC (one communication every 5 sec with 47K EOL)

MANUFACTURER'S INSTALLATION INSTRUCTIONS.

 $550~\mu A$  max @ 24 VDC (one communication every 5 sec with EOL <1K)

5.5 mA (with LED latched on)

LED Current: 5.5 mA (with LED latched on)End-of-Line

Resistance: 47K  $\Omega$ 

Initiating Device Circuit Wiring Resistance: 1,500  $\Omega$  max

SLC Loop Resistance: 40  $\Omega$  max.

### **Environmental**

Operating Temperature: 32°F - 120°F (0°C - 49°C)

Humidity: 10% - 93% non-condensing

# **Ordering Information**

SK-Monitor Monitoring Module

### **Accessories**

SMB500 4" Square Surface Mount Electrical

Box



This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact Silent Knight 12 Clintonville Road, Northford, CT 06472-1610

**MADE IN AMERICA** 

FORM# 350131 Rev C © 2012 Honeywell International Inc.

Phone: (800) 328-0103, Fax: (203) 484-7118. www.silentknight.com



# **SK-Monitor-2**

# **Intelligent Dual Monitor Module**

The SK-Monitor-2 module is capable of monitoring two separate Class B circuits simultaneously, making it ideal for waterflow tamper switch and flow switch monitoring.

For more information about the IntelliKnight system, or to locate you nearest source, please call 1-800-328-0103.

# **Description**

The SK-Monitor-2 is an addressable monitor module with two initiating circuits for use with Silent Knight IntelliKnight series fire alarm control panels (FACPs). The SK-Monitor-2 acts as an interface to contact devices, such as waterflow switches and pull stations.

The SK-Monitor-2 supports Class B supervised wiring to the load device. Conventional 4-wire smoke detectors can be monitored for alarm and trouble conditions.

# **Features**

- Monitor two circuits, with unique addresses, simultaneously
- · Support for Class B wiring
- Fully supervised
- Panel controlled status LED that flashes green in normal state and is solid red in alarm
- Attractive ivory cover plate
- Rotary address switches for fast installation
- · SEMS screws for easy wiring
- UL Listed



**SK-Monitor-2** 

# Installation

SK-Monitor-2 mounts directly into a 4" square electrical box. The box must have a minimum depth of 2-1/8". A surface mount electrical box (System Sensor® part number SMB500) is available from Silent Knight.

# Compatibility

The SK-Monitor-2 is compatible with the following IntelliKnight FACP's:

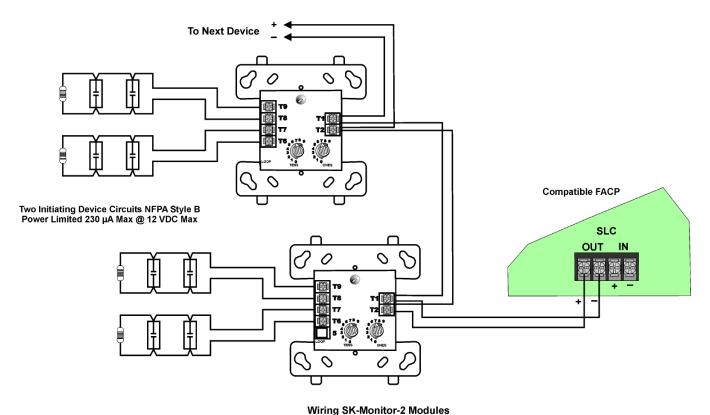
5700

5808

5820XL

# **Model SK-Monitor-2**

# Intelligent Dual Monitor Module



# **Specifications**

# **Physical**

Height: 4.5" H x 4" W x 1.25" D Shipping Weight: 6.3 oz (196 g)

### Electrical

Operating Voltage: 15 - 32 VDC Current Draw (LED on): 6.4 mA max Operating Current (LED flashing): 750 µA End-of-Line Resistance: 47K  $\Omega$ 

Max IDC wiring resistance:  $1,500\Omega$ SLC Line Loop Resistance:  $40\Omega$  max.

### **Environmental**

Operating Temperature: 32°F – 120°F (0°C – 49°C)

Humidity: 10% - 93% non-condensing

# **Accessories**

SMB500 4" Square Surface Mount Electrical Box



This document is not intended to be used for installation purposes. We try SILENT to keep our product information up-to-date and accurate. We cannot cover KNIGH all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact Silent Knight 12 Clintonville Road, Northford, CT 06472-1610 Phone: (800) 328-0103, Fax: (203)484-7118. www.silentknight.com

# **MADE IN AMERICA**

FORM# 350124 Rev B © 2009 Honeywell International Inc.





# Intelligent Photoelectric Smoke Sensors

The SK-Photo is a photoelectric smoke detector and the SK-Photo-T is a photoelectric smoke detector with thermal. These plug in smoke detectors, with

integral communication, provide features that surpass conventional detectors and are for use with Silent Knight IntelliKnight Fire Alarm Control Panels (FACPs).

For more information about the IntelliKnight system, or to locate your nearest source, please call 800-328-0103 or in Connecticut, call (203) 484-7161.

# **Description**

SK-Photo and SK-Photo-T are plug-in type smoke sensors that combine a photoelectric sensing chamber with addressable analog communications. Point ID capability allows each detector's address to be set with rotary address switches, providing exact detector locations for selective maintenance when chamber contamination reaches unacceptable levels.

SK-Photo and SK-Photo-T have a unique optical sensing chamber that is engineered to sense smoke produced by a wide range of combustion sources. In the SK-Photo-T, dual electronic thermistors add 135°F (57°C) thermal technology to maximize detection.

# **Features**

- · Sleek, low-profile design
- · Base included
- Reliable analog communications for trouble-free operation
- · Age resistant polymer housing
- Dual electronic thermistor design on the SK-Photo-T
- · Superior EMI resistance for reliability
- Simple field cleaning for code compliance
- Variety of mounting options to meet any application
- Dual LED indicators for 360° visibility
- Detector transmits signal to indicate maintenance is required
- Optional remote LED annunciator (System Sensor® PN RA100Z)

- Plug-in mounting provides ease of installation
- Tamper-proof feature available on mounting bases
- · Listed for use in duct applications
- Rotary address switches for fast installation
- · UL Listed
- FM Approved

# **Specifications**

# **Physical**

Height: 2.0" (5.0 cm)
Diameter: 4.1" (10.4 cm)
Shipping Weight: 5.2 oz. (147 g)

### **Electrical**

Operating Voltage: 15-32 VDC

Standby Current:

300 µA @ 24 VDC Maximum

Alarm Current: 6.5 mA @ 24 VDC max (with LED on)

# Environmental

Operating Temperature

SK-Photo: 32° - 120°F (0°C - 49°C)

SK-Photo-T: 32° - 100°F (0°C - 38°C)

Humidity: 10% – 93% non-condensing

### Other Ratings

SK-Photo-T Thermal: Fixed temperature set point 135°F (57°C) Velocity: 0 – 4000 fpm (0 – 20 m/sec) SK-Photo Insect Screen Hole Size:

0.016" (0.41 mm) nominal



SK-Photo (Base included)

# Compatibility

The SK-Photo and SK-Photo-T are compatible with the following IntelliKnight FACPs:

5700 5808 5820XL

SK-Photo and SK-Photo-T are compatible with the following detector bases:

B210LP (included) 6" base B501 2 wire base B501BHT-2 Temporal base B224RB Relay base B224BI Isolator base B501BH-2 Sounder base



# Model SK-Photo and SK-Photo-T Intelligent Photoelectric Smoke Sensors



# **Engineering Specifications**

The contractor shall furnish and install where indicated on the plans, Intelligent photoelectric smoke sensors Silent Knight SK-Photo or SK-Photo-T with thermal. The combination detector head, and twist-lock base, shall be UL listed and compatible with Silent Knight's IntelliKnight fire control panels.

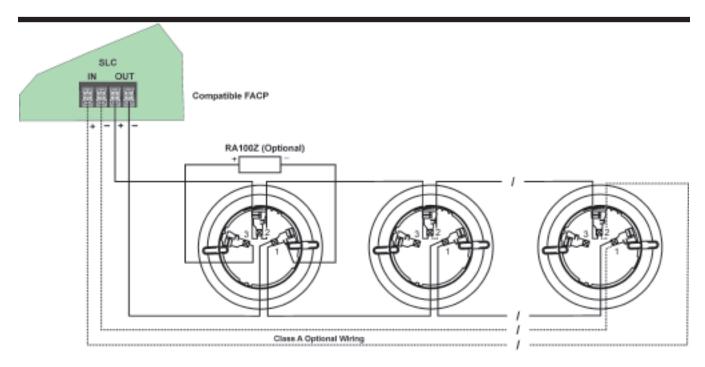
The base shall permit direct interchange with SK-Photo or SK-Photo-T. Base shall be the appropriate twist-lock base part number B210LP (included).

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

The calibration of the detector shall be capable of being selected and measured by the control panel without the need for external test apparatus.

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

The SK-Photo shall automatically perform a functional test of the detector. The test method shall simulate effects of products of combustion in the chamber to ensure testing of detector circuits.



Wiring SK-Series Detector Mounting Bases





# SK-Pull-SA and SK-Pull-DA

# **Intelligent Pull Stations**

The SK-Pull-SA and SK-Pull-DA are a single action or dual action addressable fire alarm pull station for use with Silent Knight's IntelliKnight fire control panel. Extremely easy to operate, the SK-Pull-DA and SK-Pull-SA provide a fast and practical means of manually initiating a fire alarm signal. The IntelliKnight panel recognizes each manual pull station by its specific address saving precious seconds in determining the location of an alarm.

For more information about the IntelliKnight system, or to locate you nearest source, please call 1-800-328-0103.

# **Description**

The SK-Pull-SA is a single action pull station requiring only one motion to activate the station. The SK-Pull-DA is a dual action pull station requiring two motions to active the station. Both pull stations are designed to work with Silent Knight Intelliknight series fire alarm control panels (FACPs).

# **Features**

- Installer can open station without causing an alarm condition
- Dual-color LED is visible through handle of station blinks green to indicate normal operation and remains steady red in an alarm condition
- Key operated test and reset lock using lock plate actuator
- · Key matches compatible FACP locks
- Meets the Americans with Disabilities Act Accessibility Guidelines (ADAAG) controls and operating mechanisms guidelines (Section 4.1.3[13])
- Meets ADA requirement for 5 lbs maximum pull force to active
- Shell, door, and handle molded from durable LEXAN<sup>®</sup>
- · Reliable analog communications for trouble-free operation
- · Braille text on station handle
- Handle latches in down position and the word Activated appears, clearly indicating the station has been pulled
- · Rotary address switches for fast installation
- UL Listed, including UL 38, Standard of Manually Actuated Signaling System



SK-Pull-SA



**SK-Pull-DA** 

# Compatibility

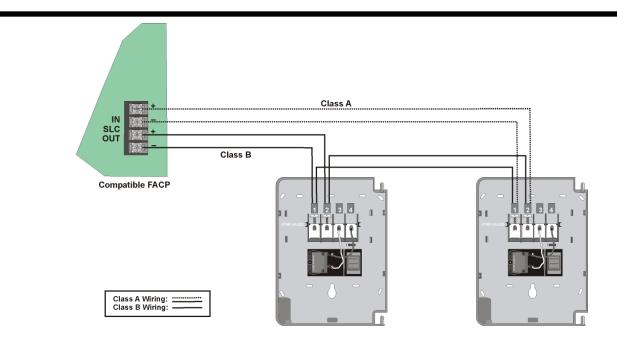
The SK-Pull-SA and SK-Pull-DA are compatible with the following IntelliKnight FACP's:

# Model SK-Pull-DA and SK-Pull-SA Intelligent Pull Stations

# **Engineering Specifications**

The contractor shall furnish and install where indicated on the plans, Addressable Pull Stations, Silent Knight model SK-Pull-SA single action pull station or SK-Pull-DA, dual action pull station.

SK-Pull-DA or SK-Pull-SA meet the ADAAG controls and operating mechanisms guidelines, and the ADA requirements for a 5 lb. maximum pull force to activate the pull station.



Wiring SK-Pull-SA & SK-Pull-DA Pull Stations

# **Specifications**

# **Physical**

Height: 5.5" (14 cm)
Width: 4" (10.2 cm)
Depth: 5.4 oz. (3.7 cm)

Housing Material: LEXAN polycarbonate resin

Bi-Colored LED:

Blinking Green: Normal Steady Red: Alarm

Switch: Single pole, single throw (SPST) normally open (N/O) switch which closes upon activation of the pull station

### **Electrical**

Operating Voltage: 15-32 VDC

Average Operating Current (LED flashing): 300 µA

Wire Gauge: Up to 12 AWG (3.1 mm<sup>2</sup>)

### **Environmental**

Operating Temperature 32° – 120°F (0°C – 49°C)

Humidity: 10% - 93% non-condensing

# **Accessories**

BG-TR Optional trim ring.
SB-I/O Surface backbox



This document is not intended to be used for installation purposes. We try to keep our product information up-to-date and accurate. We cannot cover all specific applications or anticipate all requirements. All specifications are subject to change without notice. For more information, contact Silent Knight 12 Clintonville Road, Northford, CT 06472-1610

Phone: (800) 328-0103, Fax: (203) 484-7118. www.silentknight.com

# **MADE IN AMERICA**

FORM# 350135 Rev B © 2012 Honeywell International Inc.



# Series 43T AC Bells



# Description

The Wheelock Series 43T bells provide the durable operation and dependable performance required for life safety alarm systems.

A complete range of vibrating models is offered in 6" and 10" sizes for 115 or 24-volt AC operation in indoor or outdoor installations. All models provide high sound output with low power consumption. All models are provided with screw terminal inputs for secure in-out field wiring.

### **Features**

- Approvals include: UL Standard 464, Factory Mutual (FM), and California State Fire Marshal (CSFM).
- Complies with OSHA 29,Part 1910.165
- High sound output with low current draw
- 6" and 10" shell sizes in 115 or 24 AC models
- Integral RFI suppression minimizes induced noise on alarm lines
- Semi-flush mounting to standard 4" square backboxes or surface mounting to Wheelocks surface backboxes
- Polarized for supervision of alarm lines with screw terminal inputs for fast and secure in-out field wiring of #12 to #18
   AWG wire
- Attractive textured finish to enhance appearance and durability
- For combined audible (bell) and visual signaling, convenient retrofit assemblies (Series RSSP) are available with Multi-Candela or single candela strobes (See Data Sheet S0410 or Wheelock Fire Products Catalog)

# Specifications and Ordering Information

•		•				
Model Number	Order Code	Shell Size	Input Voltage	Input Current	dBA @ 10 Ft.	Mounting Options *
43T-G6-24-R	1627	6"	24 VAC	0.410	86	
43T-G6-24-S	1626	6"	24 VAC	0.410	86	
43T-G6-115-R	1631	6"	115 VAC	0.085	86	
43T-G6-115-S	1630	6"	115 VAC	0.085	86	D,E,J,K,N,O,P,R,S
43T-G10-24-R	1647	10"	24 VAC	0.410	88	
43T-G10-24-S	3800	10"	24 VAC	0.410	88	
43T-G10-115-R	1651	10"	115 VAC	0.085	88	
43T-G10-115-S	3693	10"	115 VAC	0.085	88	

- \* Refer to Data Sheet #S7000 for mounting options.
- 1. Typical dBA at 10 feet is measured in an anechoic chamber.
- 2. All models are provided with in-out screw terminals.
- 3. Each bell mechanism is adjusted to operate only with the shell provided. Do not mix shells and mechanisms during installation.





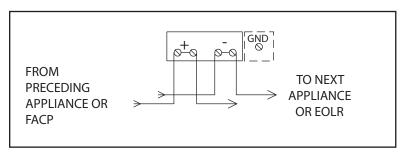


F5946

### Architects and Engineers Specifications

The alarm signals shall be Wheelock Series 43T Bells or approved equal. They shall be UL Listed for Fire Protective Service with models for vibrating operation and optional steel shells from 6" to 10" diameter. Sound output at 10 feet shall range up to 88 dBA. The bells shall semi-flush mount to standard 4" square backboxes or surface mount to Wheelock indoor BB backbox or outdoor WBB backbox. All bell models shall be polarized for line supervision and shall have screw terminals for in-out field wiring. The finish on all models shall be textured enamel.

# Wiring (All Bell Models)



Wheelock products must be used within their published specifications and must be PROPERLY specified, applied, installed, operated, maintained and operationally tested in accordance with their installation instructions at the time of installation and at least twice a year or more often and in accordance with local, state and federal codes, regulations and laws. Specification, application, installation, operation, maintenance and testing must be performed by qualified personnel for proper operation in accordance with all of the latest National Fire Protection Association (NFPA), Underwriters' Laboratories (UL), National Electrical Code (NEC), Occupational Safety and Health Administration (OSHA), local, state, county, province, district, federal and other applicable building and fire standards, guidelines, regulations, laws and codes including, but not limited to, all appendices and amendments and the requirements of the local authority having jurisdiction (AHJ).

WARNING: PLEASE READ THESE SPECIFICATIONS AND ASSOCIATED INSTALLATION INSTRUCTIONS CAREFULLY BEFORE USING, SPECIFYING OR APPLYING THIS PRODUCT. FAILURE TO COMPLY WITH ANY OF THESE INSTRUCTIONS, CAUTIONS OR WARN-INGS COULD RESULT IN IMPROPER APPLICATION, INSTALLATION AND/OR OPERATION OF THESE PRODUCTS IN AN EMERGENCY SITUATION, WHICH COULD RESULT IN PROPERTY DAMAGE, AND SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS.

NOTE: Due to continuous development of our products, specifications and offerings are subject to change without notice in accordance with Wheelock Inc. standard terms and conditions.



WE ENCOURAGE AND SUPPORT NICET CERTIFICATION 3 YEAR WARRANTY

S0600 43T 06/11

NJ Location 273 Branchport Ave. Long Branch, NJ 07740 P: 800-631-2148 F: 732-222-8707 www.coopernotification.com



