

# **MODEL 5496**

Intelligent Power Module

Installation and Operations Manual

Document 151276 08/12/10 Rev: E1

P/N 151276:E1 ECN: 10-484

#### **Contents**

#### Section 1 Overview 1-1 1.1 1.2 1.3 About This Manual .......1-1 1.4 Section 2 Before You Begin Installing \_\_\_\_\_\_\_\_2-1 2.1 2.2 Environmental Specifications 2-1 2.3 Preventing Water Damage 2-1 2.4 2.5 Earth Fault Resistance 2-3 2.6 Section 3 Hardware Installation ......3-1 AC Power 3-1 3.1 3.2 3.3 3.4

Appendix A Compatible Devices	A-1
Silent Knight Fire Product Warranty and Return Policy	
Manufacturer Warranties and Limitation of Liability	

ii 151276

# Section 1 Overview

## 1.1 5496 Description

The Model 5496 Intelligent Power Module provides additional power and notification circuits to a Silent Knight addressable FACP. The 5496 can power all IntelliKnight compatible notification appliances and auxiliary power modules.

The 5496 is capable of performing single or dual interlocking operations for pre-action and deluge releasing systems. See Section 8.6 of FACP installation manual.

The 5496 has four output circuits that can be configured as notification or auxiliary power circuits. Outputs are rated 3.0 A (6.0 A total for each 5496).

The 5496 is optically isolated, providing ground loop isolation and transient protection.

The 5496 provides configuration options that eliminate the need for sychronization modules when using AMSECO, Faraday, Gentex, System Sensor, or Wheelock synchronization appliances.

## 1.2 Agency Requirements

The 5496 has the same requirements as the main control panel. These requirements are listed in Silent Knight addressable FACP Installation Manuals. Silent Knight Addressable FACP Installation Manuals can be found on Silent Knight's web site at www.silentknight.com.

### 1.3 About This Manual

This manual covers installation of 5496 hardware. Software configuration information is contained in a Silent Knight addressable FACP Installation Manuals. Silent Knight Addressable FACP Installation Manuals can be found on Silent Knight's web site at www.silentknight.com.

# 1.4 How to Contact Silent Knight

If you have a question or encounter a problem not covered in this manual, contact Silent Knight Technical Support at 800-446-6444.

To order parts, contact Silent Knight Sales at 800-328-0103 or (203) 484-7161.

151276

Model 5496 Intelligent Power Module Installation and Operation Manual

1-2 151276

# Section 2 Before You Begin Installing

#### 2.1 What's in the Box?

The Model 5496 ships with the following hardware:

- A cabinet with all hardware assembled
- Two keys for the 5496 front door
- Ten 4.7K ohm end-of-line resistors

Note: For UL installations Model 7628 4.7k $\Omega$  end-of-line resistor (ordered separately) must be used.

• A battery wiring harness and jumper to wire batteries in series

# 2.2 Environmental Specifications

It is important to protect the 5496 control panel from water. To prevent water damage, the following conditions should be AVOIDED when installing the units:

- Do not mount directly on exterior walls, especially masonry walls (condensation)
- Do not mount directly on exterior walls below grade (condensation)
- Protect from plumbing leaks
- Protect from splash caused by sprinkler system inspection ports
- Do not mount in areas with humidity-generating equipment (such as dryers, production machinery)

When selecting a location to mount the 5496, the unit should be mounted where it will NOT be exposed to temperatures outside the range of 0°C-49°C (32°F-120°F) or humidity outside the range of 10%-93% at 30°C (86°F) noncondensing.

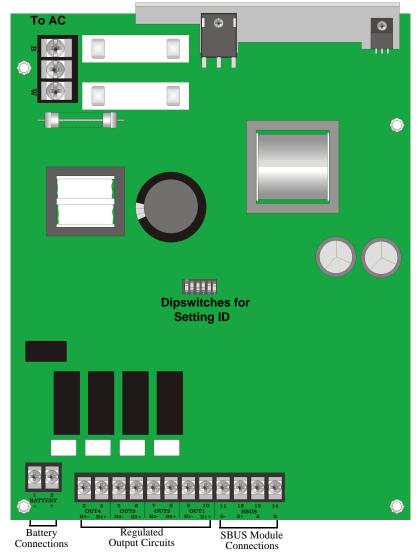
## 2.3 Preventing Water Damage

Water damage to the fire system can be caused by moisture entering the cabinet through the conduits. Conduits that are installed to enter the top of the cabinet are most likely to cause water problems. Installers should take reasonable precautions to prevent water from entering the cabinet. Water damage is not covered under warranty.

151276 2-1

# 2.4 5496 Board and Terminal Strip Description

Figure 2-1 shows the 5496 circuit board including location of terminals and the dipswitch for setting the module ID.



All Circuits Supervised Power limited, except Battery and AC which are supervised non-power limited.

Figure 2-1 The 5496 Board Layout

2-2 151276

Table 2-1 describes the 5496 connections and provides electrical ratings where appropriate.

**Table 2-1: Terminal Strip Description and Electrical Ratings** 

Tori	Terminal # and Label		Description		Rating	
Ten			Description	Voltage	Current	
	В		AC input (hot)	120 VAC, 60 Hz	2.7 A	
	ф		Earth ground	N/A	N/A	
	W		AC input (neutral)	120 VAC, 60 Hz	2.7 A	
1	-	Battery	Battery	24 VDC	0.75 A	
2	+	Battery	Battery	24 VDC	0.73 A	
3	-	I/O 4*	Output circuit	24 VDC	3.0 A	
4	+	1/0 4	Sutput effective	24 100	Notification Circuits	
5	-	I/O 3*	Output circuit	24 VDC	3.0 A	
6	+	1,00	Surput encur	21 120	Notification Circuits	
7	-	I/O 2*	Output circuit	24 VDC	3.0 A	
8	+				Notification Circuits	
9	-	I/O 1*	Output circuit	24 VDC	3.0 A	
10	+				Notification Circuits	
11	-		SBUS power	24 VDC	1.0 A	
12	+	SBUS			1.071	
13	A		SBUS communication	5 VDC	100 mA	
14	В		22 02 communication	0.20	100 1111	

<sup>\*</sup> Regulated/special application when used for releasing.

# 2.5 Earth Fault Resistance

Table 2-2 lists the earth fault resistance detection for each applicable terminal on the FACP.

Table 2-2: Earth Fault Resistance Values by Terminal

Function	Terminal Number	Terminal Label		Value (in ohms)
Pattory	1	-	BATTERY	0
Battery	2	+	DALLENI	0
Notification Appliance Circuit 4	3	H4-	OUT4	0
Notification Appliance Circuit 4	4	H4+	0014	0
Natification Appliance Circuit 2	5	Н3-	OLUT2	0
Notification Appliance Circuit 3	6	H3+	OUT3	0
Natification Appliance Circuit 2	7	H2-	OUT2	0
Notification Appliance Circuit 2	8	H2+	0012	0
NT-4:6:4: Ali Cii4 1	9	H1-	OUT1	0
Notification Appliance Circuit 1	10	H1+	OUT1	0

151276 2-3

# 2.6 Calculating Current Draw and Standby Battery

This section is for helping you determine the current draw and standby battery needs for your installation.

### 2.6.1 Worksheet Requirements

Follow the steps below to determine 5496 current draw and standby battery requirements.

#### Filling in the Current Draw Worksheet

Refer Table 2-4 in Section 2.6.2 to complete the following steps.

- 1. Add up the current draw for all auxiliary devices and record in the table at Line B.
- 2. Add up all notification appliance loads and record in the table at Line C.
- 3. For notification appliances and auxiliary devices not mentioned in the manual, refer to the device manual for the current ratings.
- 4. Make sure that the total alarm current you calculated, including current for the panel itself, does not exceed 6.0 A. This is the maximum alarm current allowable.
- 5. Complete the remaining instructions in Table 2-4 to determine battery size requirements.

#### 2.6.1.1 Maximum Battery Standby Load

Table 2-3 shows the maximum battery standby load for the 5496 based on 24 and 60 hours of standby. The standby load calculations of line J in the Current Draw Calculation Worksheet (Table 2-4) must be less than the number shown in Table 2-3 for the battery size used and standby hours required.

Table 2-3: Maximum	<b>Battery</b>	Standby	Load

Rechargeable Battery Size	Max. Load for 24 hrs. Standby, 5 mins. Alarm	*Max. Load for 60 hrs. Standby, 5 mins. Alarm
7 AH	270 mA	105 mA
12 AH	475 mA	190 mA
18 AH	685 mA	270 mA
35 AH	1370 mA	540 mA

<sup>\*</sup> Required for NFPA 72 Auxiliary Protected Fire Alarm systems for Fire Alarm Service (City Box) and Remote Station Protected Fire Alarm systems (Polarity Reversal) and Digital Alarm Communicator/Transmitter (DACT).

Note: 33 max battery size for FM (Factory Mutual) installations

2-4 151276

#### 2.6.2 Current Draw Worksheet

For each 5496 in the installation, use this worksheet to determine current requirements during alarm/battery standby operation. (Copy this page if additional space is required.)

**Table 2-4: Current Draw Calculation Worksheet** 

	Device	Number of Devices	Current per	Device	Standby Current	Alarm Current
	For each device use this formula:	This column	X This column	=	Current per numb	per of devices.
	5496 Intelligent Power Module	1	Standby:	40 mA	40 mA	
	(Current draw from battery)	1	Alarm:	160 mA		160 mA
A		1	•	5496 Current	40 mA	160 mA
	Auxiliary Devices		Refer to device i	nanual for curr	rent ratings.	
			Alarm/Standby	mA	mA	mA
			Alarm/Standby	mA	mA	mA
			Alarm/Standby	mA	mA	mA
			Alarm/Standby	mA	mA	mA
В			Auxiliary De	vices Current	mA	mA
	Notification appliances		Refer to device i	nanual for curi	rent ratings.	
			Alarm:	mA	0 mA	mA
			Alarm:	mA	0 mA	mA
			Alarm:	mA	0 mA	mA
			Alarm:	mA	0 mA	mA
C			Notification Applia	nces Current	0 mA	mA
D	Total current ratings of all devices in	system (line A + li	ine B + line C)		mA	mA
E	Total current ratings converted to am	peres (line D x .00	1):		A	A
F	Number of standby hours (24 or 60 fe	or NFPA 72, Chapt	er 1, 1-5.2.5).		Н	
G	Multiply lines E and F.		Total :	standby AH	AH	
Н	Alarm sounding period in hours. (For example, 5 minutes = .0833 hou	rs.)				Н
I	Multiply lines E and H.		Tota	l alarm AH		AH
J	Add lines G and I.		Total standby an	d alarm AH	АН	

151276 2-5

# 2.6.3 Wire Routing

You must follow power-limited wiring techniques, which include maintaining one-quarter inch spacing between power-limited and non-power limited circuits and separating high and low voltage circuits.

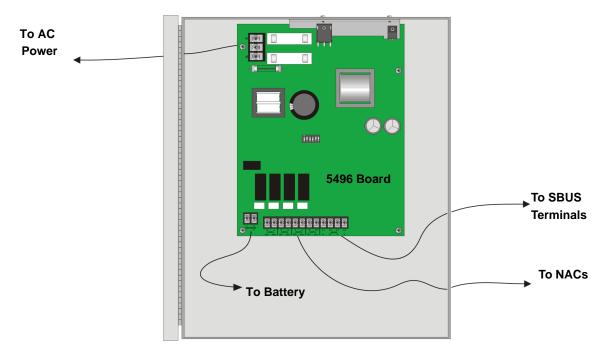


Figure 2-2 Wire Routing Example

2-6 151276

# **Section 3 Hardware Installation**

5496 installation involves the following steps:

- Connect AC power (Section 3.1) and backup battery (Section 3.2).
- Make physical connection to a Silent Knight addressable FACP (see Section 3.3).
- Set an ID for the 5496 (Section 3.3.1).
- Make physical connection to any outputs that will be powered by this 5496. See Section 3.4 for notification appliance wiring information. Refer to Silent Knight addressable FACP Installation Manuals for software configuration information and other information about installing outputs. Silent Knight Addressable FACP Installation Manuals can be found on Silent Knight's web site at www.silentknight.com.

#### 3.1 AC Power

At installation, connect the AC terminals to 120 VAC source as shown in Figure 3-1. It may be necessary for a professional electrician to make this connection.

The AC terminals are rated as 120 VAC, 50 or 60 Hz, 2.5 A.

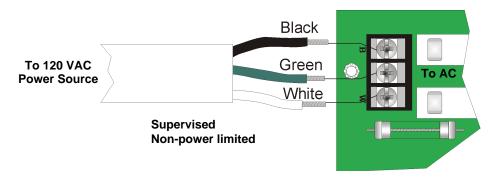


Figure 3-1 AC Power Connection

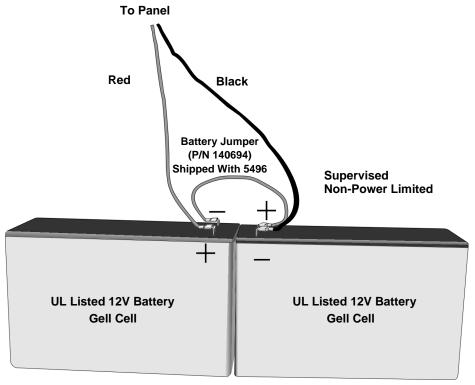
151276 3-1

# 3.2 Battery Connection

The 5496 battery charge capacity is 7.0 AH not to exceed 35.0 AH. Use 12V batteries of the same AH rating. It is recommended that you replace batteries every five years. Determine the correct AH rating per your current load calculation (see Table 2-4).

Note: If you require the power of back up batteries that are too large for the 5496, you can use the RBB cabinet. The RBB Remote Battery Box, holds batteries up to the 35 AH size. (Refer to P/N 151306 for RBB installation instructions.

Wire batteries in series to produce a 24-volt equivalent. Do not parallel batteries to increase the AH rating.



Replace batteries every 5 years.

Figure 3-2 Battery Connection

3-2 151276

# 3.3 Connecting the 5496 to the FACP

- 1. Connect the 5496 to the appropriate SBUS. The 5496 is connected directly to a Silent Knight addressable FACP.
- 2. Use the on-board dipswitch to assign an ID number to the 5496. (See Section 3.3.1) Figure 2-1 shows the location of the dipswitches on the 5496 board.
- 3. Configure the 5496 module by adding it to the system (through JumpStart or manually). You can also assign a name to the module. These procedures are described in Silent Knight addressable FACP Installation Manuals. Silent Knight Addressable FACP Installation Manuals can be found on Silent Knight's web site at www.silentknight.com.

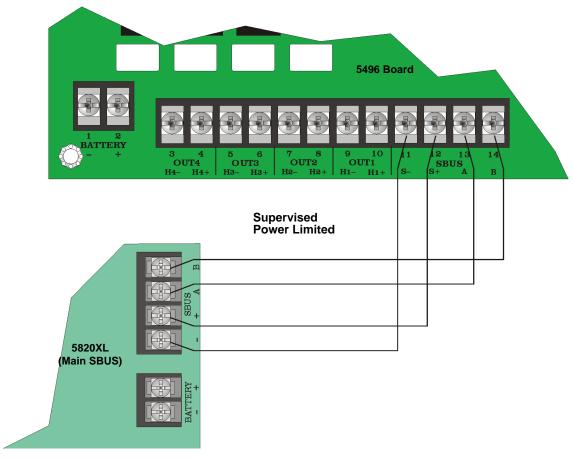


Figure 3-3 Class B 5496 Connection to FACP

151276 3-3

# 3.3.1 Setting the Device ID

All SBUS modules in the system must have a unique number (1-31) to identify them to the FACP. Use the DIP switch on the 5496 board to set the module ID number. Figure 2-1 shows the location of the dipswitch on the board. Figure 3-4 shows dipswitch setting and the corresponding module ID numbers.

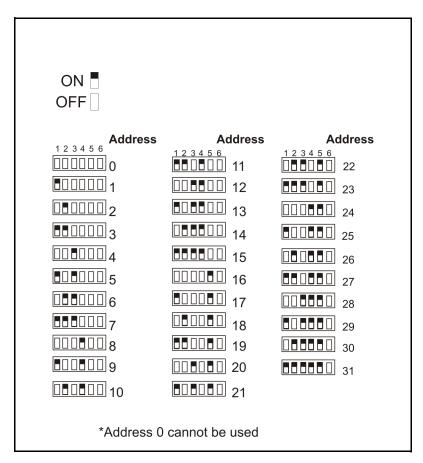


Figure 3-4 Possible Module Addresses

3-4 151276

# 3.4 Notification Appliance Wiring

**Note:** Not all devices can use the Sync feature. Be sure to check Table A-1 in Appendix A to ensure the device you have chosen will work with this feature.

## 3.4.1 Class A Supervised Wiring

Figure 3-5 shows how to wire for Class A output supervision. Use in/out wiring methods for proper supervision. Refer to Section 4 for notification appliances compatible with the 5496.

#### **Class A Output Notification Circuits**

The configuration shown in Figure 3-5 shows two, 3-amp devices wired as Class A circuits. When you are using the outputs as Class A circuits, loop the wiring back to the corresponding circuit pair. For Class A wiring, no external EOL is necessary since it is built into the 5496 board.

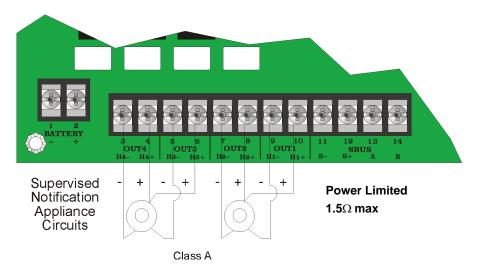


Figure 3-5 Class A Supervised Input/Output Connections

151276 3-5

### 3.4.2 Class B Supervised Wiring

Figure 3-6 shows how to wire for Class B output supervision. Use in/out wiring methods for proper supervision. Refer to Section 4 for notification appliances that must be used with the 5496.

#### **Class B Output Notification Circuits**

Figure 3-6 shows four, 1.5 amp devices wired as Class B circuits.

Place a 4.7k ohm EOL resistor (provided) at the end of each circuit to enable supervision when using all outputs as Class B notification appliance circuits. The 4.7k EOLs must be wired to the terminals whether or not you are using all output terminals.

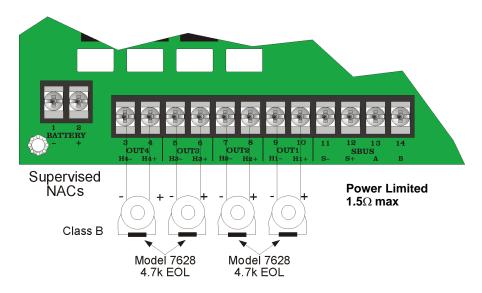


Figure 3-6 Regulated Class B Supervised Input/Output Connections

### 3.4.3 Releasing Operations

Approved releasing solenoids are list in Table 3-1. Do not mix cross alarming zones with smoke verification zones. There must be at least two automatic detection devices in each protected space. Spacing must be reduced to 0.7 times the linear spacing in accordance with NFPA 72.

 Manufacturer
 Part Number
 Rating
 Current
 Freq

 Asco
 T8210A107
 24 VDC
 3A max
 0 Hz

 8210G207
 24 VDC
 3A max
 0 Hz

Table 3-1: Approved Releasing Solenoids

3-6 151276

### 3.4.4 Auxiliary Power Configuration

Output circuits 1-4 on the control panel can be used as auxiliary power circuits. The three types of auxiliary power available are:

- Door Holder (see Section 3.4.4.1 for description)
- Constant (see Section 3.4.4.2 for description)
- Resettable (see Section 3.4.4.3 for description)

Auxiliary power circuits are power limited. Each circuit can source up to 3A (total current for all output circuits must not exceed 6 A).

To configure an output circuit as auxiliary power:

- 1. Wire the output circuit(s) that will be used for auxiliary power. See Figure 3-7 for location of the output circuits.
- 2. Configure the auxiliary power output through programming for Door Holder, Constant or Resettable power.

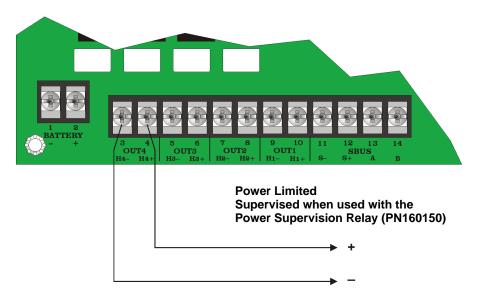


Figure 3-7 Output Circuits Used as Auxiliary Power

151276 3-7

#### 3.4.4.1 Door Holder Power

Door holder is intended for fire door applications. When there are no alarms in the system and the panel has AC power, door holder circuits have 24-volt power present at their terminals. Any alarm will cause power to discontinue. Power will be re-applied when the system is reset. If AC power is off for more than 15 seconds the auxiliary door holder power will be discontinued to conserve the battery backup power. When AC power is restored, power is immediately restored to the door holder circuits.

#### 3.4.4.2 Constant Power

Use constant power for applications that require a constant auxiliary power source. Power is always present at Constant circuits.

#### 3.4.4.3 Resettable Power

Resettable power is typically used to power beam detectors, flame detectors, and conventional 4-wire smoke detectors. For circuits selected as Resettable, 24-volt power is always present at the terminals unless a system reset occurs. If a system reset occurs, power is removed from the terminals for 30 seconds, then re-applied.

3-8 151276

# **Appendix A Compatible Devices**

For proper operation, you must use polarized devices with a Model 7628 4.7k ohm EOL resistor on each circuit. All supervised notification appliances used with the IFP-FFT must be polarized.

# A.1 Notification Appliances

Note: Not all devices can use the Sync feature, be sure to check A.1 to ensure the device you have chosen will work with this feature. This control is UL listed for single circuit synchronization.

Table A-1 below lists notification appliances compatible with the fire alarm control panel. Appliances which can be synchronized indicate the type of sync available in the columns marked Audio and/or Visual

**Table A-1: Compatible Notification Appliances** 

Manufacturer	Model	Audio	Visual	Туре
	SH24W-153075	V	<b>V</b>	Horn/Strobe
	SAD24-153075		<b>V</b>	Strobe
	SAD24-75110		<b>/</b>	Strobe
	SL24W-75110		<b>/</b>	Strobe
	SL24C-3075110		~	Strobe
	SLB24-75		~	Strobe
	RSD24-153075		~	Strobe
	RSD24-75110		~	Strobe
AMSECO	SH24W-75110	~	<b>/</b>	Horn/Strobe
	SH24W-3075110	~	~	Horn/Strobe
	SHB24-75	~	~	Horn/Strobe
	SCM24W-153075	~		Chimes/Strobe
	SCM24W-75110	~		Chimes/Strobe
	SCM24C-3075110	~		Chimes/Strobe
	SCM24C-177	~		Chimes/Strobe
	H24W	~		Horn
	H24R	~		Horn

151276 A-1

**Table A-1: Compatible Notification Appliances** 

Manufacturer	Model	Audio	Visual	Туре
	446			Vibrating Bell
	476			Vibrating Bell
	477			Single Stroke Bell
	2700 -MR, -T, -Y, -Z			Strobe
	2701 Series			Strobe
	2705 Series			Strobe
	2820	<b>V</b>	~	Snyc Temporal Horn/Strobe
	2821	~	~	Snyc Temporal Horn/Strobe
	2824	~	~	Horn Strobe
	5333			Multi-Tone Horn)
	5336			Multi-Tone Horn/Strobe
	5337			Multi-Tone Horn/Strobe
	5338			Multi-Tone Horn/Strobe
	5343			Single Tone Horn/Strobe
F 1.	5346			Electronic Horn with Strobe
Faraday	5347			Electronic Horn with Strobe
	5348			Single Tone Horn/Strobe
	5373			8-Tone Horn/Strobe
	6321			Sync Mini Horn/Strobe
	6322			Mini Horn/Sync Strobe
	6380			8-Tone Electronic Signal/Strobe
	5376			8-Tone Horn/Strobe
	5377			8-Tone Horn/Strobe
	5378			8-Tone Horn/Strobe
	5383			8-Tone Horn/Strobe with Sync Strobe
	5386			8-Tone Horn/Strobe with Sync Strobe
	5387			8-Tone Horn/Strobe with Sync Strobe
	5388			8-Tone Horn/Strobe with Sync Strobe
	5508			Single Gang Sync Strobe
	5509			Strobe

A-2 151276

**Table A-1: Compatible Notification Appliances** 

Manufacturer	Model	Audio	Visual	Туре
	5510			Strobe
	5511			Strobe
	5512			Strobe
	5516			Strobe
	5517			Strobe
	5518			Strobe
	5519			Strobe
	5521			4" Square Sync Strobe
	5522			4" Square Sync Strobe
	6120			Horn
	6140			Horn
	6223			Horn
	6226			Horn/Strobe
_	6227			Horn/Strobe
Faraday	6228			Horn/Strobe
con't	6243			Electron-Mechanical Horn
	6244			Electron-Mechanical Horn
	6245			Electron-Mechanical Horn
	6246			Electron-Mechanical Horn/Strobe
	6247			Electron-Mechanical Horn/Strobe
	6248			Electron-Mechanical Horn/Strobe
	6300			Mini-Horn
	6301			Mini-Horn
	6302			Mini-Horn
	6310			Mini-Horn/Strobe
	6311			Mini-Horn/Strobe
	6312			Mini-Horn/Strobe
	6314 Series -M, -R, -T, -Y, -Z			Strobe
	6320			Sync Mini Horn/Strobe

151276 A-3

**Table A-1: Compatible Notification Appliances** 

Manufacturer	Model	Audio	Visual	Туре
	S2415-FC			Strobe
	S241575-FC			Strobe
	S2430-FC			Strobe
	130-3117C			Mini Horn
	130-3147C			Mini Horn
	BLV-6			Vibrating Bell
	BLV-10			Vibrating Bell
	BLVCH			Vibrating Chime
	H12/24-FC			Horn
	H12/24W-FC			Horn
	H12/24K-FC			Horn
FCI	HC12/24-FC			Horn
	HC12/24W-FC			Horn
	HC12/24K-FC			Horn
	P2415-FC			Horn/Strobe
	P2415W-FC			Horn/Strobe
	P2415K-FC			Horn/Strobe
	P241575-FC			Horn/Strobe
	P241575W-FC			Horn/Strobe
	P241575F-FC			Horn/Strobe
	P241575K-FC			Horn/Strobe
	P2430-FC			Horn/Strobe
FCI	P2430W-FC			Horn/Strobe
	P2430K-FC			Horn/Strobe
	P2475-FC			Horn/Strobe
	P2475W-FC			Horn/Strobe
	P2475K-FC			Horn/Strobe
	P24110-FC			Horn/Strobe
	P24110W-FC			Horn/Strobe
	P24110K-FC			Horn/Strobe
	S2430W-FC			Strobe
	S2430K-FC			Strobe
	S2475-FC			Strobe
	S2475W-FC			Strobe
	S2475K-FC			Strobe
	S24110-FC			Strobe
	S24110W-FC			Strobe
	S24110K-FC			Strobe
E 1 10: :	450			Horn
Federal Signal	VALS			Horn/Strobe

A-4 151276

**Table A-1: Compatible Notification Appliances** 

Manufacturer	Model	Audio	Visual	Туре
	GEC-24-15	V	~	Horn/Strobes
	GEC-24-30	~	~	Horn/Strobes
	GEC-24-60	~	~	Horn/Strobes
	GEC-24-75	~	~	Horn/Strobes
	GEC-24-177	~	~	Horn/Strobes
	GEC-24-110	~	~	Horn/Strobe
	GEC-24-15/75	~	~	Horn/Strobe
	GX91	~		MiniHorn Steady Tone
	GX93	~		MiniHorn Temporal Tone
	HG124			Horn
	HS24-15	~	~	Horn/Strobe
	HS24-30	V	~	Horn/Strobe
	HS24-60	V	~	Horn/Strobe
Gentex	HS24-75	V	~	Horn/Strobe
	HS24-110	~	~	Horn/Strobe
	HS24-1575	~	~	Horn/Strobe
	GCC24	V	~	Multi Candella Horn/Strobe Ceiling Mount
	GCCR24	V	~	Multi Candella Horn/Strobe Ceiling Mount
	GCS24		~	Multi Candella Strobe Ceiling Mount
	GCSR24		~	Multi Candella Strobe Ceiling Mount
	GECR-24	V	~	Multi Candella Horn/Strobe
	GES24-15		~	Strobes
	GES24-30		~	Strobes
	GES24-60		~	Strobes
	GES24-75		~	Strobes
	GES24-110		~	Strobes
	GES24-15/75		~	Strobes
	GES24-177		~	Strobes
	GES3-24		~	Multi Candella Strobe
	GESR-24		~	Multi Candella Strobe
	GEH-24	~		Horn
	ST24-30		~	Strobe
Gentex	ST24-60		~	Strobe
con't	ST24-75		~	Strobe
	ST24-110		~	Strobe
	ST24-1575		~	Strobe
	WGEC24-75W	V	~	Weatherproof Horn/Strobe
	WGES24-75W		~	Weatherproof Strobe
	WGMS-24-X			Horn/Strobe

151276 A-5

**Table A-1: Compatible Notification Appliances** 

Manufacturer	Model	Audio	Visual	Туре
	CHR	V		Chime
	CHW	~		Chime
	CHSR	V	<b>'</b>	2-Wire Chime/Strobe
	CHSW	V	<b>'</b>	2-Wire Chime/Strobe
	HR	V	<b>'</b>	Horn
	HW		~	Horn
	HRK		<b>'</b>	Horn
	P2R	V	<b>'</b>	2-Wire Horn/Strobe
	P2R-P	V	<b>'</b>	2-Wire Horn/Strobe
	PC2R	V	<b>'</b>	2-Wire Horn/Strobe
	PC2R-P	~	<b>'</b>	2-Wire Horn/Strobe
	P2RH	~	<b>'</b>	2-Wire Horn/Strobe High Candela
	P2RH-P	~	<b>'</b>	2-Wire Horn/Strobe High Candela
	PC2RH	~	<b>'</b>	2-Wire Horn/Strobe High Candela
	PC2RH-P	V	<b>V</b>	2-Wire Horn/Strobe High Candela
System Sensor	P2W	~	~	2-Wire Horn/Strobe
•	P2W-P	~	<b>'</b>	2-Wire Horn/Strobe
	PC2W	~	<b>'</b>	2-Wire Horn/Strobe
	PC2W-P	V	<b>'</b>	2-Wire Horn/Strobe
	P2WH	~	<b>'</b>	2-Wire Horn/Strobe High Candela
	P2WH-P	~	<b>'</b>	2-Wire Horn/Strobe High Candela
	PC2WH	V	<b>'</b>	2-Wire Horn/Strobe High Candela
	PC2WH-P	V	<b>'</b>	2-Wire Horn/Strobe High Candela
	P2RK	V	<b>'</b>	2-Wire Horn/Strobe
	PC2RK	V	<b>'</b>	2-Wire Horn/Strobe
	P2RHK	~	<b>'</b>	2-Wire Horn/Strobe High Candela
	PC2RHK	~	~	2-Wire Horn/Strobe High Candela
	P4R	~	<b>V</b>	4-Wire Horn/Strobe
	PC4R	~	~	4-Wire Horn/Strobe
	P4RH	~	~	4-Wire Horn/Strobe High Candela
	P4W	~	<b>V</b>	4-Wire Horn/Strobe

A-6 151276

**Table A-1: Compatible Notification Appliances** 

Manufacturer	Model	Audio	Visual	Туре
	PC4W	V	~	4-Wire Horn/Strobe
	P4WH	V	<b>V</b>	4-Wire Horn/Strobe High Candela
	PC4WH	V	<b>V</b>	4-Wire Horn/Strobe High Candela
	P4RK	V	<b>V</b>	4-Wire Horn/Strobe
	PC4RK	V	<b>V</b>	4-Wire Horn/Strobe
	P4RHK	~	<b>V</b>	4-Wire Horn/Strobe High Candela
	PC4RHK	~	<b>V</b>	4-Wire Horn/Strobe High Candela
	PC4RH	~	<b>V</b>	4-Wire Horn/Strobe High Candela
	SR		<b>V</b>	Strobe
	SR-P		<b>V</b>	Strobe
	SCR		<b>V</b>	Strobe
	SCR-P	· ·		Strobe
	SRH	<b>✓</b> Strobe		Strobe High Candela
System Sensor	SRH-P		<b>V</b>	Strobe High Candela
con't	SCRH		<b>~</b>	Strobe High Candela
	SCRH-P		<b>~</b>	Strobe High Candela
	SW		<b>~</b>	Strobe
	SW-P		<b>~</b>	Strobe
	SCW		<b>~</b>	Strobe
	SCW-P		<b>~</b>	Strobe
	SWH		<b>~</b>	Strobe High Candela
	SWH-P		<b>~</b>	Strobe High Candela
	SCWH		<b>~</b>	Strobe High Candela
	SCWH-P		<b>~</b>	Strobe High Candela
	SRK		<b>~</b>	Strobe
	SCRK		<b>~</b>	Strobe
	SRHK		~	Strobe High Candela
	SCRHK		<b>/</b>	Strobe High Candela

151276 A-7

**Table A-1: Compatible Notification Appliances** 

Manufacturer	Model	Audio	Visual	Туре
	AH-12	~		Horn
	AH-24	~		Horn
	AH-12WP	~		Horn Weatherproof
	AH-24WP	~		Horn Weatherproof
	AMT-241575W	~	~	Multi-Tone Horn Strobe
	AMT-24MCW		~	Mutli-Tone Horn Strobe
	AMT-241575W-NYC	~	~	Multi-Tone Horn Strobe
	AMT-12/24	~		Multi-tone Horn
	AMT-12/24 NYC	~		Multi-tone Horn
	AS-121575W		~	Horn/Strobe
	NH-12/24	~		Horn
	AS-241575W	~	~	Horn/Strobe
XX71 1 1	AS-24MCC	~	~	Horn/Strobe
Wheelock	AS-24MCCH	~	~	Horn/Strobe
	AS-24MCW	~	~	Horn/Strobe
	AS-24MCWH	~	~	Horn/Strobe
	ASWP-2475W	~	~	Horn/Strobe Weatherproof
	ASWP-2475C	~	~	Horn/Strobe Weatherproof
	ASWP-24MCWH	~	~	Horn/Strobe
	ASWP-24MCCH	~	~	Horn/Strobe
	CH-70	~		Chime
	CH-90	~		Chime
	CH70-241575W		~	Chime/Strobe
	CH70-24MCW		~	Chime/Strobe
	CH70-24MCWH		~	Chime/Strobe
	CH90-24MCC		~	Chime/Strobe

A-8 151276

**Table A-1: Compatible Notification Appliances** 

Manufacturer	Model	Audio	Visual	Туре
	CH90-24MCCH		<b>V</b>	Chime/Strobe
	HS-24	~		Horn
	HS4-241575W	~	<b>'</b>	Horn/Strobe
	HS4-24MCW	~	<b>'</b>	Horn/Strobe
	HS4-24MCWH	~	~	Horn/Strobe
	HS4-24MCC	~	~	Horn/Strobe
	MIZ-24S	~	~	Mini Horn Strobe
	MT-121575W		~	MultitoneHorn Strobe
	MT-241575W	~	~	Multitone Horn Strobe
	MT-24MCW		~	Multitone Horn Strobe
	MTWP-2475W		~	Multitone Horn Strobe
	MTWP-2475C		~	Multitone Horn Strobe
	MTG-121575W	~	~	Multitone Horn Strobe
	MTR-121575W	~	~	Multitone Horn Strobe
Wheelock	MTWPA-2475W	~	~	Multitone Horn Strobe
con't	MTWPB-2475W	~	~	Multitone Horn Strobe
	MTWPG-2475W	~	~	Multitone Horn Strobe
	MTWPR-2475W	~	~	Multitone Horn Strobe
	MTWPA-24MCCH	~	~	Multitone Horn Strobe
	ZNH	~		Horn
	NS-121575W	~	~	Horn/Strobe
	NS-241575W	~	~	Horn/Strobe
	NS-24MCW	~	~	Horn/Strobe
	NS-24MCC	~	~	Horn/Strobe
	NS-24MCCH	~	~	Horn/Strobe
	ZNS-MCW	~	<b>~</b>	Horn/Strobe
	ZNS-MCWH	~	<b>V</b>	Horn/Strobe
	ZNS-24MCC	~	<b>~</b>	Horn/Strobe
	ZNS-24MCCH	~	<b>V</b>	Horn/Strobe

151276 A-9

**Table A-1: Compatible Notification Appliances** 

Manufacturer	Model	Audio	Visual	Туре
	RSS-121575W		~	Strobe
	RSS-241575W		~	Strobe
	RSS-24MCC		~	Strobe
	RSS-24MCCR		~	Strobe
	RSS-24MCCH		~	Strobe
	RSS-24MCCHR		~	Strobe
	RSS-24MCW		~	Strobe
	RSS-24MCWH		~	Strobe
	RSSP-121575W		~	Strobe
	RSSP-241575W		~	Strobe
	RSSR-2415W		~	Strobe
	RSSR-2415C		~	Strobe
	RSSR-2475W		~	Strobe
	RSSR-2475C		~	Strobe
Wheelock con't	RSSR-24110C		~	Strobe
con t	RSSA-24110W		~	Strobe
	RSSB-24110W		~	Strobe
	RSSG-24110W		~	Strobe
	RSSR-24110W		~	Strobe
	RSSA-24MCC		~	Multi-Cd Strobe
	RSSB-24MCC		~	Multi-Cd Strobe
	RSSG-24MCC		~	Multi-Cd Strobe
	RSSR-24MCC		~	Multi-Cd Strobe
	RSSWPA-2475W		~	Strobe Weatherproof
	RSSWPA-24MCCH		~	Strobe Weatherproof
	RSSWPG-24MCCH		~	Strobe Weatherproof
	RSSWPR-24MCCH		~	Strobe Weatherproof
	RSSWP-2475W		~	Strobe Weatherproof
	RSSWP-2475C		~	Strobe Weatherproof

A-10 151276

**Table A-1: Compatible Notification Appliances** 

Manufacturer	Model	Audio	Visual	Туре
	RSSWP-24MCWH		~	Strobe Weatherproof
	ZRS-MCWH		<b>V</b>	Strobe
	ZRS-24MCC		<b>~</b>	Strobe
	ZRS-24MCCH		~	Strobe
	MB-G6-24			Motor Bell
	MB-G10-24			Motor Bell
	MB-G6-12			Motor Bell
	MB-G10-12			Motor Bell
	MIZ-24-R			Mini-Horn
Wheelock	MT-12/24-R	~	~	Multitone Horn
con't	MT4-12/24	~	<b>'</b>	Multitone Horn
	ZRS-MCW		<b>'</b>	Strobe
	MTWPR-24MCCH	~	<b>'</b>	Multitone Horn Strobe
	NH-12/24R	~		Horn
	HSR		<b>'</b>	Horn/Strobe
	HSW		<b>'</b>	Horn/Strobe
	STR		~	Strobe
	STW		~	Strobe
	HNR		~	Horn
	HNW		~	Horn

Door Holder Device

The following UL listed door holder can be used with the IFP-FFT: ESL DHS-1224

151276 A-11

Model 5496 Intelligent Power Module Installation and Operation Manual

A-12 151276

# Silent Knight Fire Product Warranty and Return Policy

#### **General Terms and Conditions**

- All new fire products manufactured by Silent Knight have a limited warranty period of 36 months from the date of manufacture against defects in materials and workmanship. See limited warranty statement for details.
- This limited warranty does not apply to those products that are damaged due to misuse, abuse, negligence, exposer to adverse environmental conditions, or have been modified in any manner whatsoever.

#### Repair and RA Procedure

- All products that are returned to Silent Knight for credit or repair require a RMA (Return Authorization) number. Call Silent Knight Customer Service at 800-328-0103 or 203-484-7161 between 8:00 A.M. and 5:00 P.M. EST, Monday through Friday to obtain a return authorization number.
- Silent Knight Technical Support is available at 800-446-6444 between 8:00 A.M. and 5:00 P.M. CST, Monday through Friday.
- All returns for credit are subject to inspection and testing at the factory before actual determination is made to allow credit.
- RMA number must be prominently displayed on the outside of the shipping box. See return address example under Advanced Replacement Policy.
- Include a packing slip that has the RMA number, a content list, and a detailed description of the problem should be included with each return.
- All products returned to Silent Knight must be sent freight pre-paid. After product is processed, Silent Knight will pay for shipping product back to customer via UPS ground.
- Return the Silent Knight product circuit board only. Products that are returned in cabinets will be charged an additional \$50 to cover the extra shipping and handling costs over board only returns. **Do not return batteries**. Silent Knight has the authority to determine if a product is repairable. Products that are deemed un-repairable will be returned to the customer.
- Product that is returned that has a board date code more than 36 months from date of manufacture will be repaired and the customer will be assessed the standard Silent Knight repair charge for that model.

#### **Advanced Replacement Policy**

- Silent Knight offers an option of advance replacement for fire product printed circuit boards that fail during the first 6 months of the warranty period. These items must be returned with transportation charges prepaid and must be accompanied by a return authorization.
- For advance replacement of a defective board contact your local Silent Knight Distributor

or call Silent Knight at 203-484-7161 to obtain a RMA (Return Authorization) number and request advanced replacement,

- A new or refurbished board will be shipped to the customer. The customer will initially be billed for the replacement board but a credit will be issued after the repairable board is received at Silent Knight. All returned products must comply with the guidelines described under "General Terms and Conditions".
- The defective board must be returned within 30 days of shipment of replacement board for customer to receive credit. No credit will be issued if the returned board was damaged due to misuse or abuse.
- Repairs and returns should be sent to: Silent Knight / Honeywell Attn: Repair Department 12 Clintonville Road Northford, CT 06472 USA

RMA Number:\_\_\_\_\_

# **Manufacturer Warranties and Limitation of Liability**

Manufacturer Warranties. Subject to the limitations set forth herein, Manufacturer warrants that the Products manufactured by it in its Northford, Connecticut facility and sold by it to its authorized Distributors shall be free, under normal use and service, from defects in material and workmanship for a period of thirty six months (36) months from the date of manufacture (effective Jan. 1, 2009). The Products manufactured and sold by Manufacturer are date stamped at the time of production. Manufacturer does not warrant Products that are not manufactured by it in its Northford, Connecticut facility but assigns to its Distributor, to extent possible, any warranty offered by the manufacturer of such product. This warranty shall be void if a Product is altered, serviced repaired by anyone other than Manufacturer or its authorized Distributors. This warranty shall also be void if there is a failure to maintain the Products and the systems in which they operate in proper working conditions.

MANUFACTURER MAKES NO FURTHER WARRANTIES, AND DISCLAIMS ANY AND ALL OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE PRODUCTS, TRADEMARKS, PROGRAMS AND SERVICES RENDERED By MANUFACTURER INCLUDING WITHOUT LIMITATION, INFRINGEMENT, TITLE, MERCHANTABILITY, OR FITNESS FOR ANY PARTICULAR PURPOSE. MANUFACTURER SHALL NOT BE LIABLE FOR ANY PERSONAL INJURY OR DEATH WHICH MAY ARISE IN THE COURSE OF, OR AS A RESULT OF, PERSONAL, COMMERCIAL OR INDUSTRIAL USES OF ITS PRODUCTS.

This document constitutes the only warranty made by Manufacturer with respect to its products and replaces all previous warranties and is the only warranty made by Manufacturer. No increase or alteration, written or verbal, of the obligation of this warranty is authorized. Manufacturer does not represent that its products will prevent any loss by fire or otherwise.

Warranty Claims. Manufacturer shall replace or repair, at Manufacturer's discretion, each part returned by its authorized Distributor and acknowledged by Manufacturer to be defective, provided that such part shall have been returned to Manufacturer with all charges prepaid and the authorized Distributor has completed Manufacturer's Return Material Authorization form. The replacement part shall come from Manufacturer's stock and may be new or refurbished. THE FOREGOING IS DISTRIBUTOR'S SOLE AND EXCLUSIVE REMEDY IN THE EVENT OF A WARRANTY CLAIM

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