

Honeywell



5496

Intelligent Power Module

Manual

Fire Alarm & Emergency Communication System Limitations

While a life safety system may lower insurance rates, it is not a substitute for life and property insurance!

An automatic fire alarm system—typically made up of smoke detectors, heat detectors, manual pull stations, audible warning devices, and a fire alarm control panel (FACP) with remote notification capability—can provide early warning of a developing fire. Such a system, however, does not assure protection against property damage or loss of life resulting from a fire.

An emergency communication system—typically made up of an automatic fire alarm system (as described above) and a life safety communication system that may include an autonomous control unit (ACU), local operating console (LOC), voice communication, and other various interoperable communication methods—can broadcast a mass notification message. Such a system, however, does not assure protection against property damage or loss of life resulting from a fire or life safety event.

The Manufacturer recommends that smoke and/or heat detectors be located throughout a protected premises following the recommendations of the current edition of the National Fire Protection Association Standard 72 (NFPA 72), manufacturer's recommendations, State and local codes, and the recommendations contained in the Guide for Proper Use of System Smoke Detectors, which is made available at no charge to all installing dealers. This document can be found at <http://www.systemsensor.com/appguides/>. A study by the Federal Emergency Management Agency (an agency of the United States government) indicated that smoke detectors may not go off in as many as 35% of all fires. While fire alarm systems are designed to provide early warning against fire, they do not guarantee warning or protection against fire. A fire alarm system may not provide timely or adequate warning, or simply may not function, for a variety of reasons:

Smoke detectors may not sense fire where smoke cannot reach the detectors such as in chimneys, in or behind walls, on roofs, or on the other side of closed doors. Smoke detectors also may not sense a fire on another level or floor of a building. A second-floor detector, for example, may not sense a first-floor or basement fire.

Particles of combustion or "smoke" from a developing fire may not reach the sensing chambers of smoke detectors because:

- Barriers such as closed or partially closed doors, walls, chimneys, even wet or humid areas may inhibit particle or smoke flow.
- Smoke particles may become "cold," stratify, and not reach the ceiling or upper walls where detectors are located.
- Smoke particles may be blown away from detectors by air outlets, such as air conditioning vents.
- Smoke particles may be drawn into air returns before reaching the detector.

The amount of "smoke" present may be insufficient to alarm smoke detectors. Smoke detectors are designed to alarm at various levels of smoke density. If such density levels are not created by a developing fire at the location of detectors, the detectors will not go into alarm.

Smoke detectors, even when working properly, have sensing limitations. Detectors that have photoelectronic sensing chambers tend to detect smoldering fires better than flaming fires, which have little visible smoke. Detectors that have ionizing-type sensing chambers tend to detect fast-flaming fires better than smoldering fires. Because fires develop in different ways and are often unpredictable in their growth, neither type of detector is necessarily best and a given type of detector may not provide adequate warning of a fire.

Smoke detectors cannot be expected to provide adequate warning of fires caused by arson, children playing with matches (especially in bedrooms), smoking in bed, and violent explosions (caused by escaping gas, improper storage of flammable materials, etc.).

Heat detectors do not sense particles of combustion and alarm only when heat on their sensors increases at a predetermined rate or reaches a predetermined level. Rate-of-rise heat detectors may be subject to reduced sensitivity over time. For this reason, the rate-of-rise feature of each detector should be tested at least once per year by a qualified fire protection specialist. Heat detectors are designed to protect property, not life.

IMPORTANT! Smoke detectors must be installed in the same room as the control panel and in rooms used by the system for the connection of alarm transmission wiring, communications, signaling, and/or power. If detectors are not so located, a developing fire may damage the alarm system, compromising its ability to report a fire.

Audible warning devices such as bells, horns, strobes, speakers and displays may not alert people if these devices are located on the other side of closed or partly open doors or are located on another floor of a building. Any warning device may fail to alert people with a disability or those who have recently consumed drugs, alcohol, or medication. Please note that:

- An emergency communication system may take priority over a fire alarm system in the event of a life safety emergency.
- Voice messaging systems must be designed to meet intelligibility requirements as defined by NFPA, local codes, and Authorities Having Jurisdiction (AHJ).
- Language and instructional requirements must be clearly disseminated on any local displays.
- Strobes can, under certain circumstances, cause seizures in people with conditions such as epilepsy.
- Studies have shown that certain people, even when they hear a fire alarm signal, do not respond to or comprehend the meaning of the signal. Audible devices, such as horns and bells, can have different tonal patterns and frequencies. It is the property owner's responsibility to conduct fire drills and other training exercises to make people aware of fire alarm signals and instruct them on the proper reaction to alarm signals.
- In rare instances, the sounding of a warning device can cause temporary or permanent hearing loss.

A life safety system will not operate without any electrical power. If AC power fails, the system will operate from standby batteries only for a specified time and only if the batteries have been properly maintained and replaced regularly.

Equipment used in the system may not be technically compatible with the control panel. It is essential to use only equipment listed for service with your control panel.

Alarm Signaling Communications:

- **IP connections** rely on available bandwidth, which could be limited if the network is shared by multiple users or if ISP policies impose restrictions on the amount of data transmitted. Service packages must be carefully chosen to ensure that alarm signals will always have available bandwidth. Outages by the ISP for maintenance and upgrades may also inhibit alarm signals. For added protection, a backup cellular connection is recommended.
- **Cellular connections** rely on a strong signal. Signal strength can be adversely affected by the network coverage of the cellular carrier, objects and structural barriers at the installation location. Utilize a cellular carrier that has reliable network coverage where the alarm system is installed. For added protection, utilize an external antenna to boost the signal.
- **Telephone lines** needed to transmit alarm signals from a premise to a central monitoring station may be out of service or temporarily disabled. For added protection against telephone line failure, backup alarm signaling connections are recommended.

The most common cause of life safety system malfunction is inadequate maintenance. To keep the entire life safety system in excellent working order, ongoing maintenance is required per the manufacturer's recommendations, and UL and NFPA standards. At a minimum, the requirements of NFPA 72 shall be followed. Environments with large amounts of dust, dirt, or high air velocity require more frequent maintenance. A maintenance agreement should be arranged through the local manufacturer's representative. Maintenance should be scheduled as required by National and/or local fire codes and should be performed by authorized professional life safety system installers only. Adequate written records of all inspections should be kept.

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Installation Precautions

Adherence to the following will aid in problem-free installation with long-term reliability:

WARNING - Several different sources of power can be connected to the fire alarm control panel. Disconnect all sources of power before servicing. Control unit and associated equipment may be damaged by removing and/or inserting cards, modules, or inter-connecting cables while the unit is energized. Do not attempt to install, service, or operate this unit until manuals are read and understood.

CAUTION - System Re-acceptance Test after Software Changes:

To ensure proper system operation, this product must be tested in accordance with NFPA 72 after any programming operation or change in site-specific software. Re-acceptance testing is required after any change, addition or deletion of system components, or after any modification, repair or adjustment to system hardware or wiring. All components, circuits, system operations, or software functions known to be affected by a change must be 100% tested. In addition, to ensure that other operations are not inadvertently affected, at least 10% of initiating devices that are not directly affected by the change, up to a maximum of 50 devices, must also be tested and proper system operation verified.

This system meets NFPA requirements for operation at 0-49° C/32-120° F and at a relative humidity 93% ± 2% RH (non-condensing) at 32°C ± 2°C (90°F ± 3°F). However, the useful life of the system's standby batteries and the electronic components may be adversely affected by extreme temperature ranges and humidity. Therefore, it is recommended that this system and its peripherals be installed in an environment with a normal room temperature of 15-27° C/60-80° F.

Verify that wire sizes are adequate for all initiating and indicating device loops. Most devices cannot tolerate more than a 10% I.R. drop from the specified device voltage.

Like all solid state electronic devices, this system may operate erratically or can be damaged when subjected to lightning induced transients. Although no system is completely immune from lightning transients and interference, proper grounding will reduce susceptibility. Overhead or outside aerial wiring is not recommended, due to an increased susceptibility to nearby lightning strikes. Consult with the Technical Services Department if any problems are anticipated or encountered.

Disconnect AC power and batteries prior to removing or inserting circuit boards. Failure to do so can damage circuits.

Remove all electronic assemblies prior to any drilling, filing, reaming, or punching of the enclosure. When possible, make all cable entries from the sides or rear. Before making modifications, verify that they will not interfere with battery, transformer, or printed circuit board location.

Do not tighten screw terminals more than 9 in-lbs. Over-tightening may damage threads, resulting in reduced terminal contact pressure and difficulty with screw terminal removal.

This system contains static-sensitive components. Always ground yourself with a proper wrist strap before handling any circuits so that static charges are removed from the body. Use static suppressive packaging to protect electronic assemblies removed from the unit.

Units with a touchscreen display should be cleaned with a dry, clean, lint free/microfiber cloth. If additional cleaning is required, apply a small amount of Isopropyl alcohol to the cloth and wipe clean. Do not use detergents, solvents, or water for cleaning. Do not spray liquid directly onto the display.

Follow the instructions in the installation, operating, and programming manuals. These instructions must be followed to avoid damage to the control panel and associated equipment. FACP operation and reliability depend upon proper installation.

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FCC Warning

WARNING: This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual may cause interference to radio communications. It has been tested and found to comply with the limits for class A computing devices pursuant to Subpart B of Part 15 of FCC Rules, which is designed to provide reasonable protection against such interference when devices are operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user will be required to correct the interference at his or her own expense.

Canadian Requirements

This digital apparatus does not exceed the Class A limits for radiation noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

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Software Downloads

In order to supply the latest features and functionality in fire alarm and life safety technology to our customers, we make frequent upgrades to the embedded software in our products. To ensure that you are installing and programming the latest features, we strongly recommend that you download the most current version of software for each product prior to commissioning any system. Contact Technical Support with any questions about software and the appropriate version for a specific application.

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This symbol (shown left) on the product(s) and / or accompanying documents means that used electrical and electronic products should not be mixed with general household waste. For proper treatment, recovery and recycling, contact your local authorities or dealer and ask for the correct method of disposal.

Electrical and electronic equipment contains materials, parts and substances, which can be dangerous to the environment and harmful to human health if the waste of electrical and electronic equipment (WEEE) is not disposed of correctly.

Table of Contents

Section 1: Overview	6
1.1: Description.....	6
1.2: Agency Requirements	6
1.2.1: Requirements for All Installations	6
1.2.2: UL 864 9th and 10th Edition	6
1.3: How to Contact Silent Knight.....	6
Section 2: Prerequisites for Installation.....	7
2.1: Hardware.....	7
2.2: Environmental Specifications	7
2.3: Preventing Water Damage	7
2.4: Calculating Current Draw and Standby Battery	7
2.4.1: Worksheet Requirements.....	7
2.4.2: Maximum Battery Standby Load.....	8
2.4.3: Current Draw Worksheet.....	8
Section 3: Installation	9
3.1: 5496 Board and Terminal Strip Description	9
3.2: Earth Fault Resistance	10
3.3: Wire Routing.....	10
3.4: AC Power.....	11
3.5: Battery Connection	11
3.6: Connecting the 5496 to the FACP	11
3.6.1: Setting the Device ID.....	12
3.7: Notification Appliance Wiring.....	12
3.7.1: Class A Supervised Wiring.....	12
3.7.2: Class B Supervised Wiring.....	13
3.7.3: Releasing Operations	13
3.7.4: Auxiliary Power Configuration	14

Section 1: Overview

1.1 Description

The 5496 Intelligent Power Module provides additional power and the notification circuits used for a Silent Knight addressable Fire Alarm Control Panel (FACP). The 5496 can power all Silent Knight 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. Refer to the *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 synchronization 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 website at www.silentknight.com.

1.2.1 Requirements for All Installations

General requirements are described below. The sections that follow describe additional requirements for the type of installation (for example, Central Station Fire Alarm systems, Local Protected Fire Alarm systems, and so on).

Use UL listed smoke detectors compatible with the FACP. Refer to the *Silent Knight Device Compatibility Document*.

Use UL listed compatible notification devices. Refer to the *Silent Knight Device Compatibility Document*.

Restricted Options

- The loss of AC signal is defaulted to 3 hours however the system allows settings from 0 - 30 hours. For UL certified installations, this number must be set from 1 to 3 hours.
- Call forwarding shall not be used.
- When you use cross-zoning, detector spacing shall be cut in half, the Alarm Verification feature is unavailable, and no delay shall be used.

1.2.2 UL 864 9th and 10th Edition

- Per the UL Continuing Certification Program, UL 864 9th edition fire alarm control equipment will retain certification after the rollout of UL 10th edition (12/2/2018).
- Installations of UL 864 10th Edition certified equipment are permitted to use UL864 9th Edition certified equipment when approved by the local Authority Having Jurisdiction (AHJ).

For product compliance, refer to the UL/ULC listing cards located on the UL online certification directory.

<https://iq.ulprospector.com>

1.3 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.

Section 2: Prerequisites for Installation

2.1 Hardware

The 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 4.7kΩ 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 FOLLOWED 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 the user selects a location to mount the 5496, the unit should be mounted where it will NOT be exposed to temperatures outside the range of 32°F-120°F (0°C-49°C) or humidity outside the range of 10%-93% at 86°F (30°C) non-condensing.

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 the warranty.

2.4 Calculating Current Draw and Standby Battery

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

2.4.1 Worksheet Requirements

To calculate the 5496 current draw and standby battery requirements, refer to the following steps.

Filling in the Current Draw Worksheet

Refer to Table 2.2 in Section 2.4.3 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 2.2 to determine battery size requirements.

2.4.2 Maximum Battery Standby Load

Table 2.1 shows the maximum battery standby load for the 5496 based on 24 and 60 hours of standby. The numbers below have a built in 20% derating factor for the battery amp-hour capacity. The standby load calculations of line J in the Current Draw Calculation Worksheet (Table 2.2) must be less than the number shown in Table 2.1 for the battery size used and standby hours required.

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

Table 2.1 Maximum Battery Standby Load

* Max battery size for FM (Factory Mutual) installations is 33AH.

† 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).

2.4.3 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.)

Device	Number of Devices	Current per Device		Standby Current	Alarm Current
For each device use this formula:	This column	X	This column	=	Current per number of devices.
5496 Intelligent Power Module (Current draw from battery)	1	Standby:	40 mA	40 mA	
		Alarm:	160 mA		160 mA
5496 Current				40 mA	160 mA
Auxiliary Devices	Refer to device manual for current ratings.				
		Alarm/Standby	mA	mA	mA
		Alarm/Standby	mA	mA	mA
		Alarm/Standby	mA	mA	mA
		Alarm/Standby	mA	mA	mA
Auxiliary Devices Current				mA	mA
Notification appliances	Refer to device manual for current ratings.				
		Alarm:	mA	0 mA	mA
		Alarm:	mA	0 mA	mA
		Alarm:	mA	0 mA	mA
		Alarm:	mA	0 mA	mA
Notification Appliances Current				0 mA	mA
Total current ratings of all devices in system (line A + line B + line C)				mA	mA
Total current ratings converted to amperes (line D x 0.001):				A	A
Number of standby hours (24 or 60 for NFPA 72, Chapter 1, 1-5.2.5).				H	
Multiply lines E and F.				Total standby AH	AH
Alarm sounding period in hours. (For example, 5 minutes = 0.0833 hours.)					H
Multiply lines E and H.				Total alarm AH	AH
Add lines G and I.				Total standby and alarm AH	AH

Table 2.2 Current Draw Calculation Worksheet

Figure 2.1 Wire Routing Example

Section 3: Installation

The 5496 installation involves the following steps:

- Connect the AC power (see Section 3.4) and the backup battery (see Section 3.5).
- Make physical connection to a Silent Knight addressable FACP (see Section 3.6).
- Set an ID for the 5496 (see Section 3.6.1).
- Make physical connection to any outputs that will be powered by this 5496. See Section 3.7 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 website at www.silentknight.com.

3.1 5496 Board and Terminal Strip Description

Figure 3.1 shows the 5496 circuit board including the location of terminals and the DIP switch for setting the module ID.

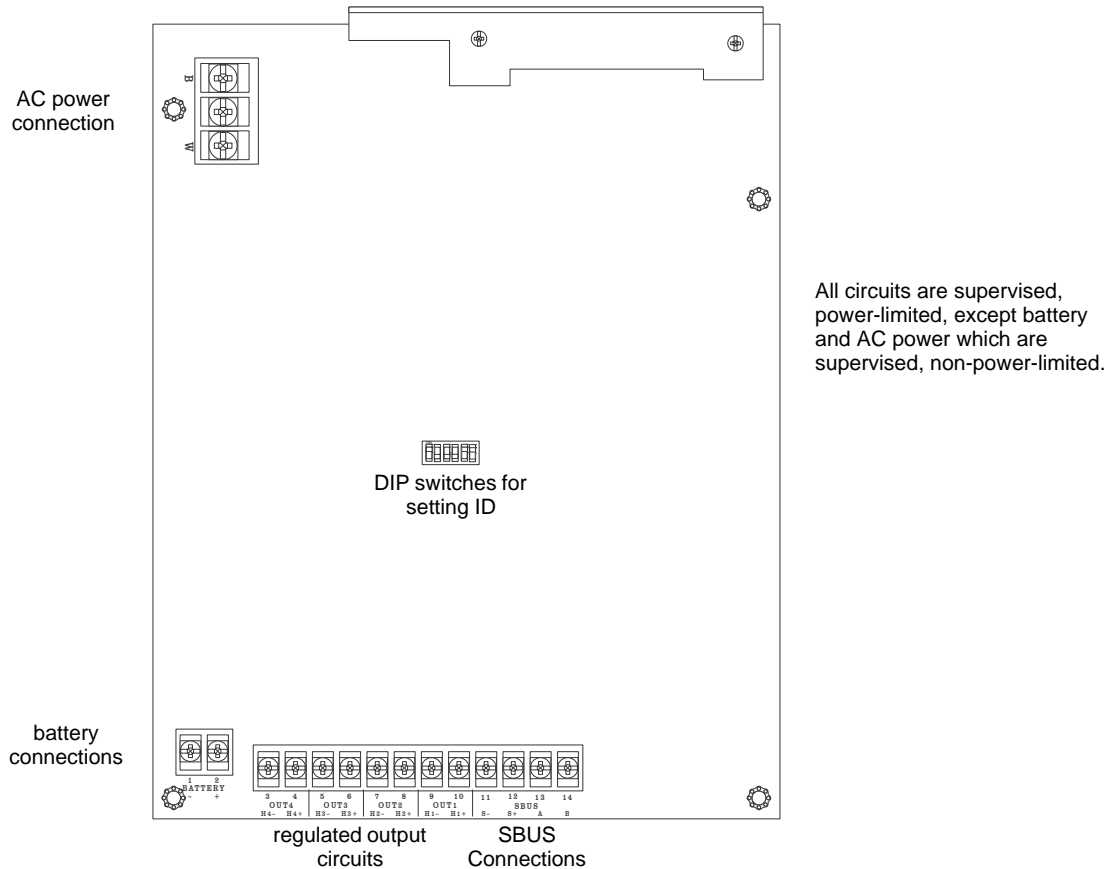


Figure 3.1 5496 Board Layout

Table 3.1 describes the 5496 connections and provides electrical ratings where appropriate.

Terminal # and Label		Description	Rating	
			Voltage	Current
	B	AC input (hot)	120 VAC, 60 Hz	2.7 A
	⏏	Earth ground	N/A	N/A
	W	AC input (neutral)	120 VAC, 60 Hz	2.7 A
1	-	Battery	24 VDC	0.75 A
2	+			
3	-	I/O 4	24 VDC	3.0 A Notification Circuits
4	+			
5	-	I/O 3	24 VDC	3.0 A Notification Circuits
6	+			
7	-	I/O 2	24 VDC	3.0 A Notification Circuits
8	+			

Table 3.1 Terminal Strip Description and Electrical Ratings

Terminal # and Label			Description	Rating	
				Voltage	Current
9	-	I/O 1	Output circuit*	24 VDC	3.0 A Notification Circuits
10	+				
11	-	SBUS	SBUS power	24 VDC	1.0 A
12	+				
13	A		SBUS communication	5 VDC	100 mA
14	B				

Table 3.1 Terminal Strip Description and Electrical Ratings

* Regulated/special application when used for releasing.

3.2 Earth Fault Resistance

Table 3.2 lists the earth fault resistance detection for each applicable terminal on the FACP.

Function	Terminal Number	Terminal Label		Value (in ohms)
Battery	1	-	BATTERY	0
	2	+		0
Notification Appliance Circuit 4	3	H4-	OUT4	0
	4	H4+		0
Notification Appliance Circuit 3	5	H3-	OUT3	0
	6	H3+		0
Notification Appliance Circuit 2	7	H2-	OUT2	0
	8	H2+		0
Notification Appliance Circuit 1	9	H1-	OUT1	0
	10	H1+		0

Table 3.2 Earth Fault Resistance Values by Terminal

3.3 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.

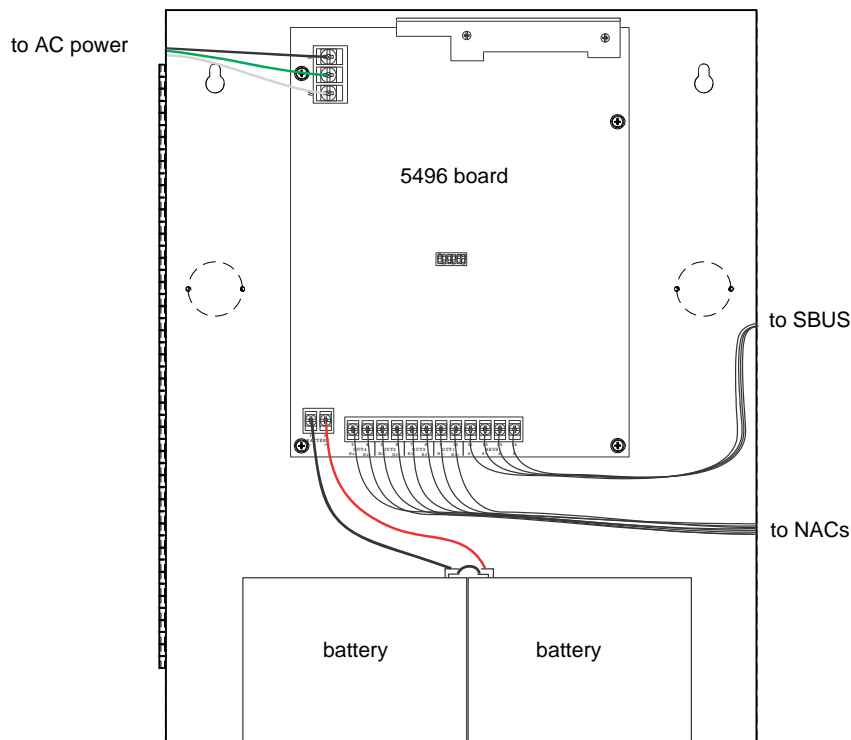


Figure 3.2 Wire Routing

3.4 AC Power

At installation, connect the AC terminals to 120 VAC source as shown in Figure 3.3. 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.

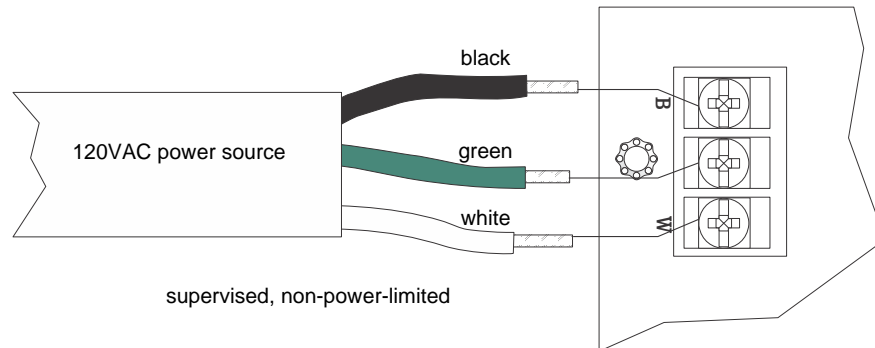


Figure 3.3 AC Power Connection

3.5 Battery Connection

The 5496 battery charge capacity is 7.0 AH - 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 2.2 on page 8).



NOTE: If you require the power of backup batteries that are too large for the 5496 cabinet, 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.

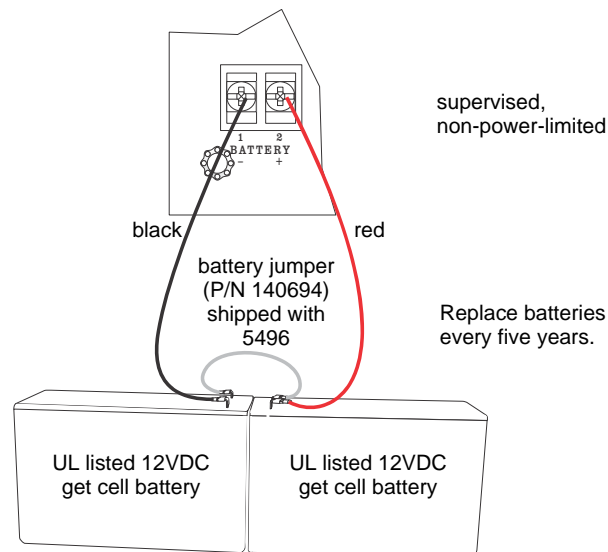


Figure 3.4 Battery Connection

3.6 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 onboard DIP switch to assign an ID number to the 5496. (Refer to Figure 3.6) Figure 3.1 shows the location of the DIP switches 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 the *Silent Knight Addressable FACP Installation Manuals*.

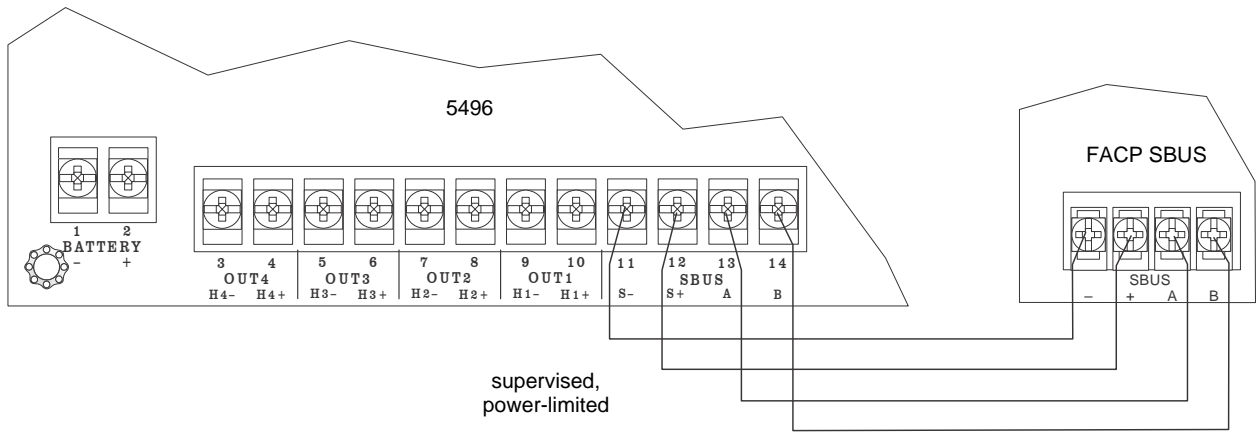


Figure 3.5 Class B 5496 Connection to FACP

3.6.1 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 3.1 shows the location of the DIP switch on the board. Figure 3.6 below shows DIP switch settings and the corresponding module ID numbers. Note that address #0 is invalid and cannot be used.

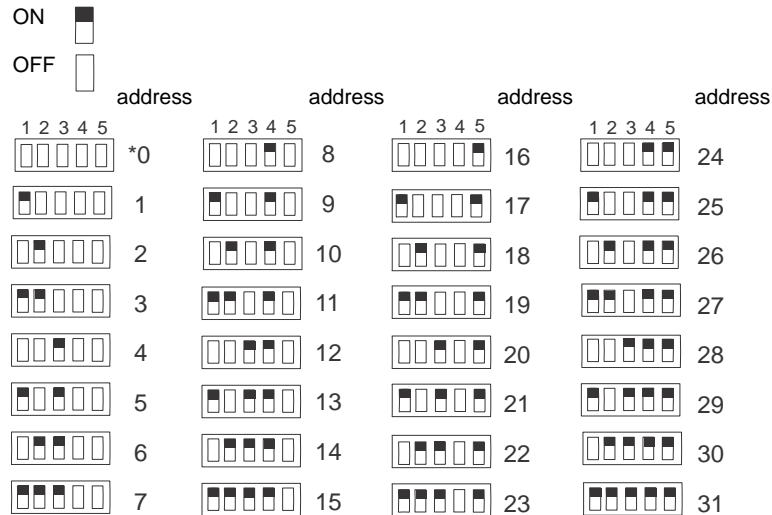


Figure 3.6 Possible Module Addresses

3.7 Notification Appliance Wiring

Not all devices can use the Sync feature. Be sure to check the list of compatible appliances in the *Silent Knight Device Compatibility Document* P/N LS10167-004SK-E to ensure the device you have chosen will work with this feature.

3.7.1 Class A Supervised Wiring

Figure 3.7 shows how to wire for Class A output supervision. Use in/out wiring methods for proper supervision.

Class A Output Notification Circuits

The configuration shown in Figure 3.7 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.

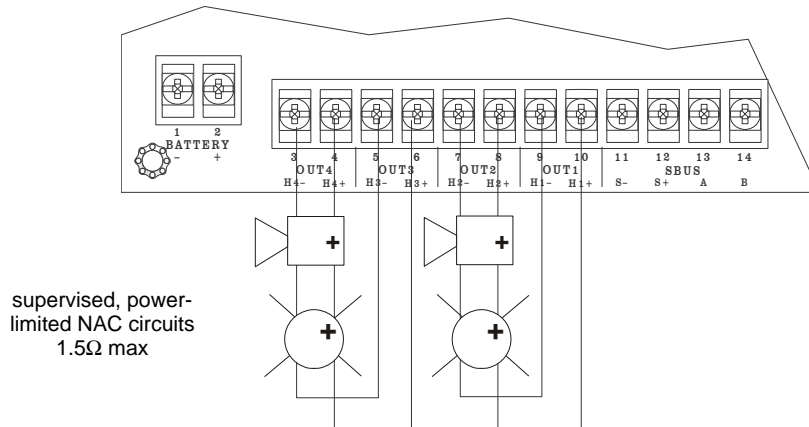


Figure 3.7 Class A Supervised Input/Output Connections

3.7.2 Class B Supervised Wiring

Figure 3.8 shows how to wire for Class B output supervision. Use in/out wiring methods for proper supervision. Refer to the *Silent Knight Device Compatibility Document* for notification appliances that must be used with the 5496.

Class B Output Notification Circuits

Figure 3.8 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.

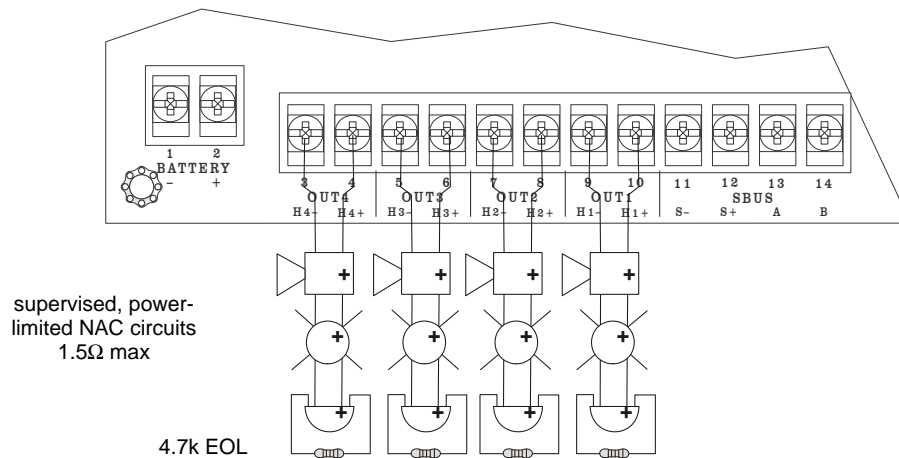


Figure 3.8 Regulated Class B Supervised Input/Output Connections

3.7.3 Releasing Operations

Approved releasing solenoids are listed in the *Silent Knight Device Compatibility Document*. Only Class B wiring can be used for releasing operations. 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.

An MRD-1 Manual Release Disconnect Switch can be used to disconnect the releasing circuits for testing and maintenance. Do not rely on disable/enable software settings to lock out releasing devices. Releasing devices must be physically disconnected per UL 864 10th Edition. Refer to the *MRD-1 Installation Document #LS10231-000GE-E* for more information.

3.7.4 Auxiliary Power Configuration

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

- Door Holder
- Constant
- Resettable
- Sounder Sync Power

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, perform the following steps.

1. Wire the output circuit(s) that will be used for auxiliary power. See Figure 3.9 below for the location of the output circuits.
2. Configure the auxiliary power output through programming for door holder, constant, resettable, or sync power.

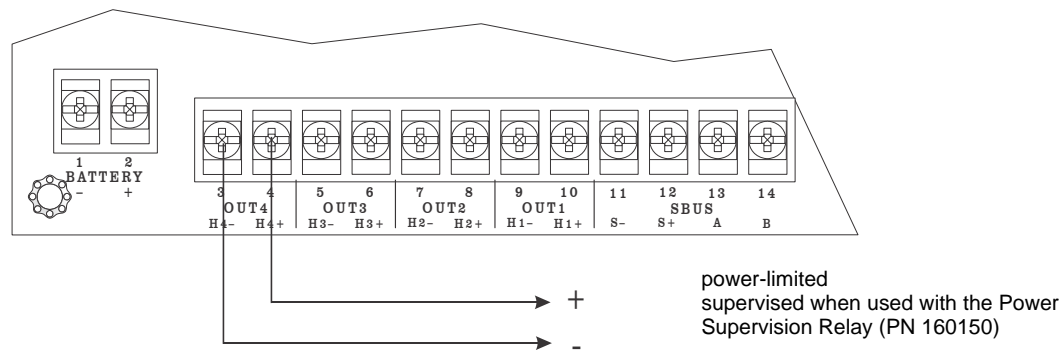


Figure 3.9 Output Circuits Used as Auxiliary Power

Door Holder Power

Door holder is intended for use with fire door applications. When there are no alarms in the system and the panel has AC power, the door holder circuits have 24-volt power present at their terminals. Any alarm will cause the power to discontinue. The Power will be re-applied when the system is reset. If the 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.

Constant Power

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

Resettable Power

Resettable power is typically used to power beam detectors, flame detectors, and conventional 4-wire smoke detectors. For circuits selected as Resettable, 24VDC 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. The wiring class of the external power source must match the wiring class of the device being powered. If extra power circuits are needed, a UL 864-listed, regulated, power-limited power supply with Class A aux power output must be used.

Sounder Sync Power

Sounder sync power continuously outputs the System Sensor synchronization pattern and it is intended for use with the B200S Series sounder bases.

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