



## **SAFEAXIS™** **Electronic Access Control**

### **Features**

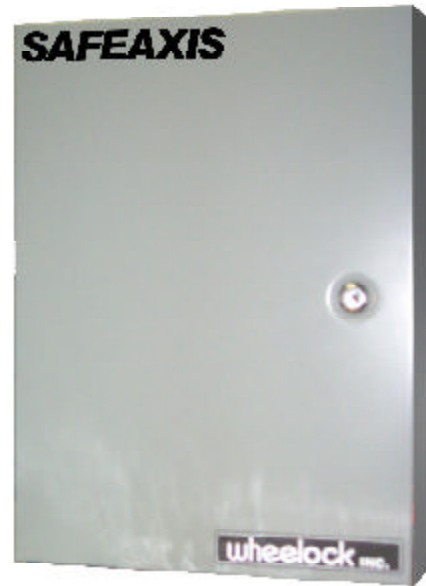
- **Uses Powerful Windows Compatible Software**
- **Supports 3,500 Card Users**
- **Fast Split-Screen Displays**
- **Plug and Play Distributed Processing Controllers & Auto Recognition**
- **Simplified Software Card Enrollment**
- **Dynamic Real -Time System Status**
- **Supports Hard and Soft Anti-Passback**
- **Trace Card User Activity**
- **New Stealth Feature**
- **Includes Power Supply with Battery Back-up**
- **Supports Industry Standard Wiegand Compatible Readers**
- **Quick Disconnect Terminal Blocks**

### **Description**

SAFEAXIS is a single workstation, standalone access control and alarm monitoring system designed specifically for 2 to 10 door applications. The cost-effective, yet feature-rich system brings proven features normally found in large systems, to small and intermediate market segments such as schools, manufacturing, office/warehouse, retail and medical office facilities. Safeaxis adds a new dimension to facility asset protection and worker safety.

The operating systems for Safeaxis are Windows 95, 98, ME, NT, 2000 and XP and is designed to support up to 3,500 cardholders.

The workstation links up to 5 Intelligent Reader Controllers (IRC) via an RS 485 communications channel. All decisions regarding alarms and access control are made by the IRC. It holds all information regarding cards, schedules, access codes, etc. The results of these decisions are communicated back to the workstation for reporting.



### **Intelligent Reader Controller (IRC)**

#### **Plug and Play Distributed Processing**

Each Intelligent Reader Controller (IRC) can independently buffer alarms and events. Each IRC database can be unique and when an IRC is added to the system it is recognized and configured automatically.

#### **Two Levels of Failsafe**

In the event that the workstation link to an IRC fails, the system shall continue to operate normally. A cardholder will be granted access in accordance with the cardholder access parameters. When the communication with the IRC is re-established, the intervening activity, which has been stored in the IRC's memory, is uploaded to the workstation.

#### **Trace Cards**

Permits the operator to trace a card user activity based on reader groups. (e.g. "Trace" Invalid Cards)

*Description Cont.*

## **Card Reader Technology**

SAFEAXIS utilizes industry standard Wiegand compatible readers (26 bits). Proximity readers can be supplied separately or in combination with a PIN pad, requiring a PIN number to be used with the card. The readers are epoxy potted and are designed for indoors and outdoor applications. SAFEAXIS also permits simplified user enrollment through the software without the need of a dedicated enrollment reader.

## **Anti-Passback**

Soft, hard and timed Anti-Passback features are supported. This feature protects against more than one person using the same card. It defines each system reader and card as IN, OUT or OTHER. Once a card is presented to an IN reader, it must be presented to an OUT reader before another IN reader, access is granted. This keeps someone from passing back their card to someone else after they have opened a door. An individual card can be exempt from Anti-Passback.

## **Help Screens**

Convenient and easy to understand help screens also reside in the software to insure fast responses to questions the operator may have. These screens are also effective tools during the original setup or when additions to existing systems are being implemented.

## **Stealth Feature**

This feature permits security management to gain access to a building without being identified to the system operator.

## **Access Levels (8)**

SAFEAXIS technology provides eight independent access levels per card. This feature allows for a temporary access without changing the regular access privileges. A second access level can be set to expire independent of the card expiration date and time. This makes it possible to provide access to an area for a limited time.

## **Auto Activate and Expire**

Auto Activate / Auto Expire is an essential flexibility feature in SAFEAXIS. This means that each access level can be set to automatically allow or deny access and become effective on a specific date. This makes it possible to issue cards prior to their effective dates or to void a card at the end of the workday.

## **Time Codes (128)**

SAFEAXIS can deny or permit access, activate, disable and delay alarm points, operate outputs and unlock doors on a timed basis.

## **Quick Disconnect Feature**

Supports fast and easy servicing of all Intelligent Reader Controllers, allowing wiring to remain on the terminals.

---

## **Intelligent Reader Controller (IRC)**

### **Specifications:**

**Enclosure:** UL Listed Type 1, with Tamper Switch

**Temperature:** 0 to 50°C

**Humidity:** 0 to 85% non-condensing

**Power:** 650 mA peak @ +12vdc, 9 watts (includes communications board) +12 vdc nominal (+13.8vdc max, +10.8 vdc min). Reverse Polarity, Protection, PTC fuse on +12 vdc input. On board +5 vdc regulator (with thermal shutdown). Transient Protected

**Power Supply:** + 12 vdc, 1.0A continuous regulated, linear (IRC-2) + 12 vdc, 2.0A continuous regulated, linear (IRC-4)

**Readers:** Software selectable Clock and Data or Wiegand (up to 64 bits) with individual outputs for red and green LED's and sounder.

**Inputs:** 2-state, optional 4-state software selectable.

**Outputs:** SPDT, rating: 1A @ 24vdc, form C

**Capacities:** 5 IRC's

**Readers:** Clock and Data or Wiegand

**Cardholders:** 3,500

**Pin Code:** Up to 9 digits

**Facility Access Levels:** 128

**Holidays:** 32

**Communications:** RS232, RS485 full duplex

**Baud Rate:** 2400 to 115,200 BPS

**Diagnostics:** TX and RX LED's, Heartbeat address LED, Output LED's

### **PC Requirements:**

**Processor:** PII 400 MHz or greater

**Memory:** 128 MB or greater

**Video board:** Capable of displaying 24 bit true color at a screen density of 1024 x 768 or better

**Sound:** One 16 bit card with associated speakers

**Monitor:** 17" displayable, .28 dot pitch or better

**Hard Drive:** 8GB or greater

**Floppy Disk:** 3.5 inch disk drive

**CD Drive:** 2X read capacity

**Operating System:** Windows 95, Windows 98, Windows ME, Windows 2000, Windows NT 4.0 or greater, XP

**Backup:** One archive device (tape, Zip Drive, CDRW etc.) adequate for hard drive

## Ordering Information

Model Number	Order Code	Description
<b>Control Equipment</b>		
IRC-2	9800	2 Door Packaged System Consisting of:
		Intelligent Reader Controller (IRC two door), Power Supply, Transformer, Battery and Housing (10"w x 12"h x 4"d), Protocol Module Priced Separately (RS232-DB or RS485-DB)
IRC-4	9801	4 Door Packaged System Consisting of:
		Intelligent Reader Controller (IRC four door), Power Supply, Transformer, Battery and Housing (12"w x 16"h x 4"d), Protocol Module Priced Separately (RS232-DB or RS485-DB)
<b>SAFEAXIS Software</b>		
SFT-1	9802	SAFEAXIS Software & Manuals (One Package with System Purchase)
<b>Components</b>		
TDM	9809	Two Door Controller Module
BBCON	9812	Line Driver for RS485 Comm. Lines
RS232-DB	9813	RS-232 Protocol Module (daughter board) for 2 door applications only
RS485-DB	9814	RS-485 Protocol Module (daughter board) for 2 to 10 door applications
Encl-2	9815	Enclosure only for IRC-2
Encl-4	9816	Enclosure only for IRC-4
PS-1	9817	Power Supply, internal (for IRC-2)
PS-2	9818	Power Supply, internal (for IRC-4)
XFMR-16	9819	Transformer Only, (for IRC-2)
XFMR-24	9820	Transformer Only, (for IRC-4)
BAT-1204	9821	Battery Only, 4AH (for IRC-2)
BAT-1207	9822	Battery Only, 7AH (for IRC-4)
<b>Readers</b>		
Prox-1	9824	Proximity Reader Indoor / Outdoor, Dark Gray, Mullion Mount
Prox-2	9825	Proximity Reader Indoor / Outdoor, Beige, Mullion Mount
Prox-3	9826	Proximity Reader Low Profile, Indoor / Outdoor, Dark Gray, Single Gang Box Mount
Prox-4	9827	Proximity Reader Low Profile, Indoor / Outdoor, Beige, Single Gang Box Mount
Prox-5	9828	Proximity Reader with Integral Key Pad, Dark Gray
MSR-1	9830	Magnetic Stripe Reader, Indoor/outdoor, Light Gray
MSR-1KP	9831	Same as above but includes Key Pad, Light Gray
WS	9832	Weather Shield
RWS	9833	Wall Plate for Single Gang Box Mounting
<b>Cards</b>		
Prox-C	9834	Proximity Cards (25)
Prox-K	9835	Proximity Key Chain (25)
MAG-C	9836	Magnetic Stripe Card (25)
Prox-B	9837	Proximity Wafers (50)

## Architects and Engineers Specifications

The Contractor shall furnish and install a single workstation, stand-alone access control and alarm monitoring system having the capacity to monitor and control up to 10 doors and support up to 3,500 cardholders. The system shall be *SAFEAXIS™*, as manufactured by Wheelock Inc. or approved equal. Those wishing to qualify as an equal shall submit information for consideration ten days prior to the date of bid.

The operating system shall be Windows PC based. Proprietary programmers will not be acceptable. The PC based workstation shall link up to 5 Intelligent Reader Controllers (IRC) via an RS485 communications channel as shown on the plans. All decisions regarding alarms and access control shall be made by the IRC. Each Intelligent Reader Controller shall hold all information regarding cards, schedules, access codes, etc. The results of these decisions shall be communicated back to the workstation for reporting.

The specified system shall be inclusive of the following features: Each Intelligent Reader Controller (IRC) shall independently buffer alarms and events. Each IRC database shall be unique to the assigned door(s). When an IRC is added to the system it shall be recognized and configured automatically, without the use of dip switches or jumpers. In the event that the workstation link to an IRC fails, the system shall continue to operate normally. A cardholder must be granted access in accordance with the cardholder access parameters. When the communication with the IRC is re-established, the intervening activity, which has been stored in the IRC's memory, shall be uploaded to the workstation.

The system shall utilize industry standard Wiegand-compatible readers. Proximity readers shall be supplied where shown on the plans. (Option - Proximity Readers shall be supplied in combination with a PIN Pad, requiring a PIN number to be used with the card.) The readers shall be epoxy potted and for indoors and/or outdoor applications. The system shall permit user enrollment through the software without the need of a dedicated enrollment reader. Soft and hard Anti-Passback features shall be provided. The system shall protect against more than one person using the same card and defines each system reader and card as IN, OUT, or OTHER. Once a card is presented to an IN reader, it must be presented to an OUT reader before another IN reader, access is granted, preventing someone from passing back their card to someone else after they have opened a door. An individual card can be exempt from Anti-Passback. The system shall permit the operator to review a card user trail to call attention to an attempt to gain access to a protected area.

The system shall support the stealth mode, permitting security management to gain access to a building without being identified to the operator. The system shall provide door access technology with up to eight independent access levels per card. This feature permits temporary access without changing the regular access privileges. A second access level may be set to expire independent of the card expiration date and time. This makes it possible to provide access to an area for a limited time. The system shall provide help screens to insure fast responses to questions the operator may have.

Provide Auto Activate / Auto Expire. Each access level can be set to automatically allow or deny access and become effective on a specific date. This makes it possible to issue cards prior to their effective dates or to void a card at the end of the workday. *SAFEAXIS* can deny or permit access, activate, disable and delay alarm points, operate outputs and unlock doors. The system shall be capable of supporting adjustable door hold open duration, extended unlock time, individual duress codes, pre alarm on door held open, blocked door recognition, forced door alarm per door and 32 holidays.

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.

**MADE IN THE USA  
1 YEAR WARRANTY**

**NATIONAL SALES OFFICE**  
800-631-2148  
Canada 800-397-5777  
E-Mail: [Info@wheelockinc.com](mailto:Info@wheelockinc.com)  
<http://www.wheelockinc.com>



Distributed By: