




P. O. Box 3559
Arlington, WA 98223
(360) 652-1088
FAX (360) 652-2217
CONTRACTOR # OLYMPCSO21Q2P

Glover Homes Project
Seattle, WA
12534 - 15th Ave. NE

Model 5208 Fire Alarm Control Panel with Digital Communicator



**The Fire Alarm Control Designed to Grow with Your
Systems Needs, Without The Growing Pains.**

The SK-5208 is a microprocessor based control panel with integrated UL listed communicator designed for applications requiring smoke detection, manual pull stations, and sprinkler supervision. It features an easy to read LCD display with programmable English readout and user friendly tactile keys. The basic unit offers 10 zones of initiation and is expandable up to 30 zones for larger applications. The SK-5208 has a complete line of supervised accessories that provide remote annunciation, auxiliary control zone expansion. Ideal for new and retrofit applications, the SK-5208 delivers the performance to handle your installation.

Features

- 10 zones, 8 Class B (Style B) and 2 Class A (Style D) or Class B (Style B) zones, expandable to 30 zones
- UL Listed
- Supervised zone expanders and I/O modules can be mounted remotely from the main control panel
- Event History Buffer (150 events) with date/time stamp
- All zones are compatible with 2- or 4-wire detectors
- 8 selectable/programmable output patterns for notification appliance circuits
- Built-in Digital Alarm Communicator Transmitter (DACT)
- 4 Notification Appliance Circuits
- 4 programmable general purpose relays
- Programmable smoke verification, pre-alarm delay, cross zoning and enhanced verification mode features that can help minimize false alarms
- Programmable from the built-in control panel touchpad, remote annunciator, or Window® downloading software
- Built-in walk test feature

Specifications

Operating Voltage: 24 VDC
Primary AC: 120 Vrms @ 60Hz, 2A
Total DC Load: 6 Amp
Current Draw:
Standby: 140 mA
Alarm: 460 mA
Dimensions:
Width: 16" (40.64 cm)
Height: 26.4" (67.06 cm)
Depth: 4" (10.16 cm)
Operating Temp: 32° to 120° F (0° to 49° C)

Optional Accessories

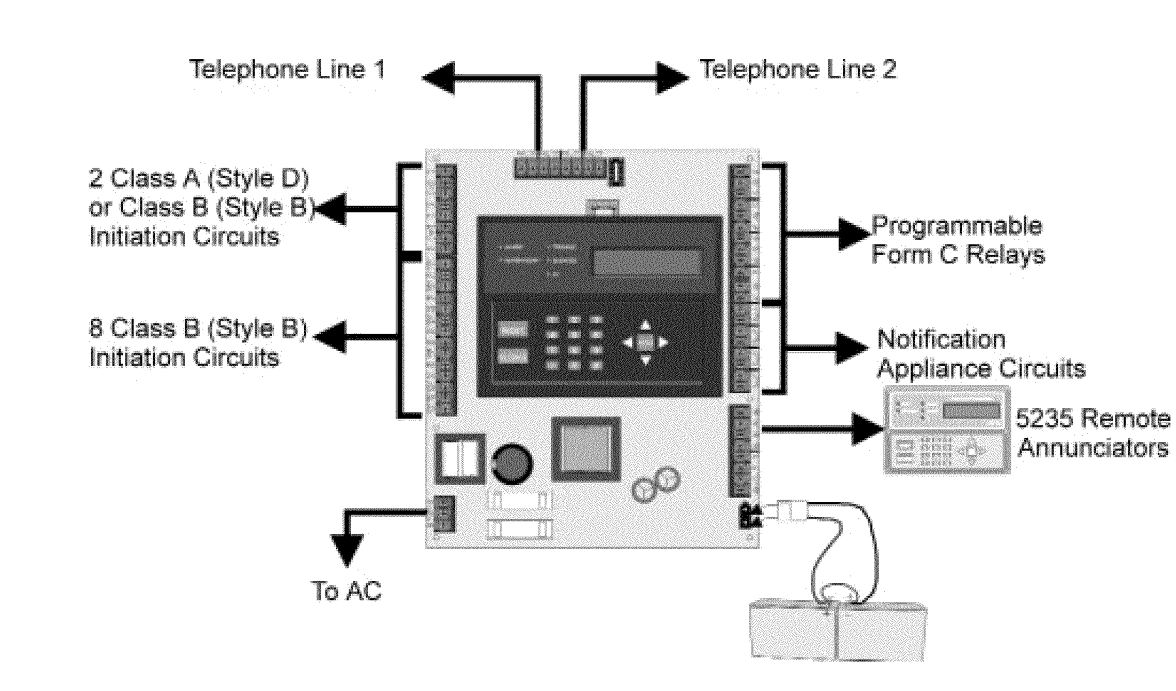
- SK-5235 LCD Remote Annunciator
- SK-5217 10 Zone Expander (2 max. per system)
- SK-5280 Status Display Module (3 max. per system)
- 7181 Fire Zone Converter
- 5220 Direct Connect Module
- SKSS Downloading Software

SILENT KNIGHT
7550 Meridian Circle, Maple Grove, MN 55369-4927
800-446-6444 or in Minnesota 612-493-6435
FAX: 612-493-6475
World Wide Web: <http://www.silentknight.com>
MADE IN AMERICA
FORM# 350318, Rev. 1/00
Copyright © 2000 Silent Knight

Model 5208 Fire Alarm Control Panel with Digital Communicator

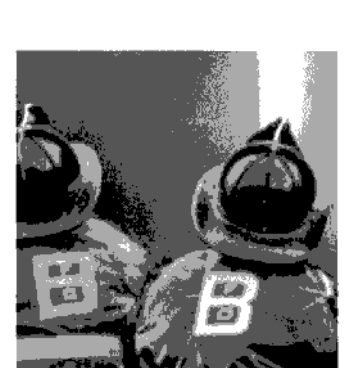
Engineering Specification

The system shall contain a fire alarm control panel to supervise and operate heat and smoke detection devices, manual fire alarm devices, alarm notification devices and visual annunciators. The system shall also be capable of monitoring for sprinkler supervisory and water flow conditions. The system must have a built in UL listed fire communicator that can be enabled/disabled as needed on a per job basis. In addition, the system will sound alarms locally for purpose of evacuation.



SILENT KNIGHT
7550 Meridian Circle, Maple Grove, MN 55369-4927
800-446-6444 or in Minnesota 612-493-6435
FAX: 612-493-6475
World Wide Web: <http://www.silentknight.com>
MADE IN AMERICA
FORM# 350318, Rev. 1/00
Copyright © 2000 Silent Knight

SK-5235 Remote Annunciator



**Program and Operate the SK-5208 FACP from a
Distance with the SK-5235 Remote Annunciator.**

The SK-5235 remote annunciator provides remote annunciation for the 5208 Fire Alarm Control Panel. The SK-5235 performs all system operations. It also provides trouble and alarm information and can be used for programming. The SK-5208 can support up to six 5235 Remote Annunciators.

Operation

When the system is normal and receiving AC power, the power LED is on and all other LEDs are off. Other LEDs turn on as the conditions occur.

Users identify themselves to the control panel by entering a code on the annunciator. When a user presses a button, the annunciator piezo beeps and the LCD prompts the user to enter a code or other relevant information.

Multiple users can work at different annunciators simultaneously without affecting each other.

Features

- 2-line 16-character LCD display
- Indicates Trouble, Alarm, Supervisory, and System Status conditions with LEDs and LCD display
- Each SK-5235 is individually supervised by the SK-5208 FACP
- Up to 6 per SK-5208 FACP
- Operation and appearance comparable to the control panel's on-board annunciator
- Can be wired up to 1500 ft from FACP

Specifications

Operating Voltage: 24 VDC
Current Draw:
Standby: 30 mA
Alarm: 50 mA
Dimensions:
Width: 7.3-1/16" (18.26 cm)
Height: 12.7 cm (5")
Depth: 1-1/8" (2.86 cm)

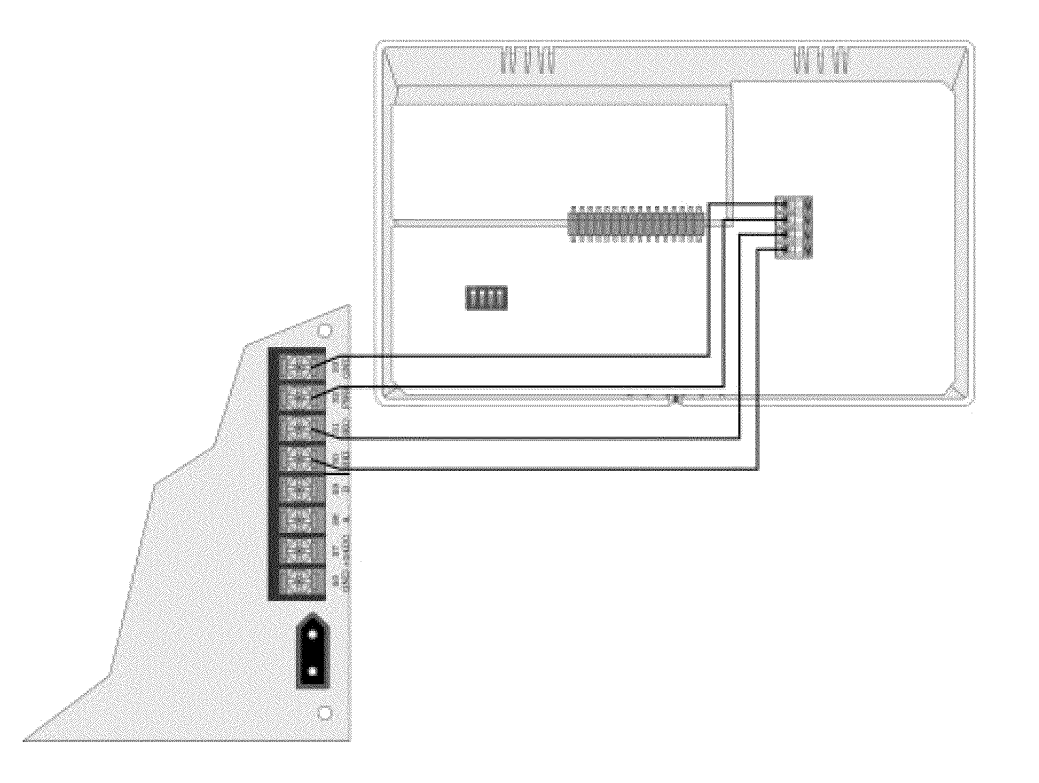
Operating Temp: 32° to 120° F (0° to 49° C)
Maximum Wiring Distance: 1500 ft.

SILENT KNIGHT
7550 Meridian Circle, Maple Grove, MN 55369-4927
800-446-6444 or in Minnesota 612-493-6435
FAX: 612-493-6475
World Wide Web: <http://www.silentknight.com>
MADE IN AMERICA
FORM# 350321, 01/00
Copyright © 2000 Silent Knight

SK-5235 Remote Annunciator

Engineering Specifications

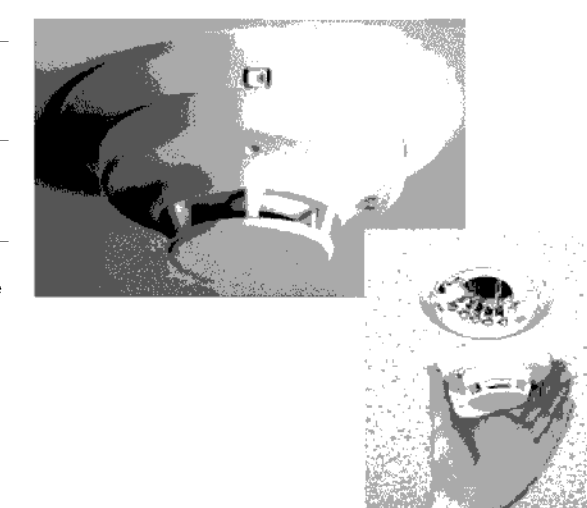
The contractor shall furnish and install where indicated on the plans, the Model SK-5235 Remote Annunciator. Module shall be of a LCD type with a 2X16 display. Module shall be capable of remote programming as well as providing alarm, trouble information along with resetting of alarms and silencing of trouble and alarm conditions. Module ID shall be programmed with a 4 position DIP. The control shall be capable of supporting up to 6 supervised SK-5235. Module shall be designed to mount on a dual gang electrical box with 18 gauge to 14 gauge wire.



SILENT KNIGHT
7550 Meridian Circle, Maple Grove, MN 55369-4927
800-446-6444 or in Minnesota 612-493-6435
FAX: 612-493-6475
World Wide Web: <http://www.silentknight.com>
MADE IN AMERICA
FORM# 350321, 01/00
Copyright © 2000 Silent Knight

CONVENTIONAL DETECTION

i3 Series Photoelectric Smoke Detectors



Models Available

Two-Wire Models
2W-B 2-wire standard
2WT-B 2-wire standard with thermal

Four-Wire Models
4W-B 4-wire standard
4WT-B 4-wire standard with thermal

Accessories
2W-MOD 2-wire loop test/maintenance module
SENS-RDR Sensitivity reader
RT Removal/replacement tool
A77-AB2 Retrofit adapter bracket

Product Overview

Plug-in detector line - mounting base included

Large wire entry port

In-line terminals with SEMS screws

Mounts to octagonal and single-gang backboxes, 4-square backboxes, or direct to ceiling

Stop-Drop "N Lock" attachment to base

Removable detector cover and chamber for easy cleaning

Built-in remote maintenance signaling

Drift compensation and smoothing algorithms

Simplified sensitivity measurement

Wide angle, dual color LED indication

Loop testing via EZ Walk feature

Built-in test switch

MEASUREMENT APPROVED

System Sensor's i³ series smoke detectors represent a significant advancement in conventional detection. The i³ family is founded on three principles: installation ease, intelligence, and instant inspection.

Installation ease. The i³ line redefines installation ease with its plug-in design. This allows an installer to pre-wire the base included with the heads. The large wire entry port and in-line terminals provide ample room for neatly routing the wiring inside the base. The base accommodates a variety of back box mounting methods as well as direct mounting with drywall anchors. To complete the installation, i³ heads plug-in to the base with a simple Stop-Drop "N Lock" action.

Intelligence. i³ detectors offer a number of intelligent features to simplify testing and maintenance. Drift compensation and smoothing algorithms are standard with the i³ line, to minimize nuisance alarms. When connected to the 2W-MOD loop test/maintenance module, or a panel equipped with the i³ protocol, 2-wire i³ detectors are capable of generating a remote maintenance signal when they are in need of cleaning. This signal is indicated via an LED located at the module and the panel. To read the sensitivity of i³ detectors, the SENS-RDR is a wireless device that displays the sensitivity in terms of percent per foot obscuration.

Instant inspection. The i³ series provides wide angle red and green LED indicators for instant inspection of the detector conditions, indicating: normal standby, out-of-sensitivity, alarm, or freeze trouble conditions. When connected to the 2W-MOD loop test/maintenance module, or a panel with the i³ protocol, the EZ Walk loop test feature is available on 2-wire i³ detectors. This feature verifies the initiating loop wiring by providing LED status indication at each detector.

System Sensor Sales and Service

System Sensor Headquarters
3600 Ohio Avenue
St. Charles, IL 60174
Ph: 800/5ENSDR
Ph: 630/977-6490
Documents on Demand
800/738-7673 x3
www.systemsensor.com

System Sensor Canada
Ph: 905-812-0771

System Sensor Europe
Ph: 44-1463-270600
Ph: 44-1463-270601

System Sensor in China
Ph: 86-20-8221-0710
Ph: 86-20-8221-0711

System Sensor - Far East
Ph: 852-22-735-0590

System Sensor - Australia
Ph: 61-3-54-281-172

System Sensor - India
Ph: 91-124-621-7170
Ph: 91-124-621-3118

© 2002 System Sensor. The company reserves the right to change product specifications without notice. 405-0358-070-1/02-0803

Architect/Engineer Specifications

Smoke detector shall be a System Sensor i³ Series model number _____ listed to Underwriters Laboratories UL 268 for Fire Protection Signaling Systems. The detector shall be a photoelectric type (model 2W-B, 4W-B) or a combination photoelectric/thermal (model 2WT-B, 4WT-B) with thermal sensor rated at 135°F (57.2°C). The detector shall include a mounting base for mounting to 3/8-inch and 4-inch octagonal, single gang, and 4-inch square back boxes

Electrical Specifications

Operating Voltage: Nominal 12-24 V nonpolarized
Min.: 8.5 V
Max.: 35 V
Maximum Signal Voltage: 30V of nominal (peak to peak)

Standby Current: 2-wire: 50 µA maximum average
4-wire: 50 µA maximum average
Maximum Alarm Current: 2-wire: 130 mA limited by control panel
4-wire: 20 mA @ 12V, 23mA @ 24V

Peak Standby Current: 2-wire: 100 µA
4-wire: N/A
Alarm Contact Ratings: 2-wire: 0.5 A @ 30V AC/DC
4-wire: 0.5 A @ 30V AC/DC

LED Modes

LED Mode	Green LED	Red LED	Condition	Duration
Power up	Blink every 10 seconds	Blink every 10 seconds	Initial LED status indication	90 seconds
Normal standby	off	off		
Out of sensitivity	off	Blink every 5 seconds		
Freeze trouble	off	Blink every 30 seconds		
Alarm	off	Solid		

Physical Specifications

Operating Temperature Range: 2W-B and 4W-B: 32°F-120°F (0°C-49°C)
2WT-B and 4WT-B: 32°F-100°F (0°C-37.8°C)

Operating Humidity Range: 0 to 95% RH noncondensing

Thermal Sensor: 130°F (57.2°C) fixed

Finish: Trouble: 2WT-B and 4WT-B only: 12" (31.75°C)

Ordering Information

Model	Thermal	Wiring	Alarm Current
2W-B	No	2-wire	130 mA max. limited by control panel
2WT-B	Yes	2-wire	130 mA max. limited by control panel
4W-B	No	4-wire	20 mA @ 12V, 23mA @ 24V
4WT-B	Yes	4-wire	20 mA @ 12V, 23mA @ 24V

System Sensor Sales and Service

System Sensor Headquarters
3600 Ohio Avenue
St. Charles, IL 60174
Ph: 800/5ENSDR
Ph: 630/977-6490
Documents on Demand
800/738-7673 x3
www.systemsensor.com

System Sensor Canada
Ph: 905-812-0771

System Sensor Europe
Ph: 44-1463-270600
Ph: 44-1463-270601

System Sensor in China
Ph: 86-20-8221-0710
Ph: 86-20-8221-0711

System Sensor - Far East
Ph: 852-22-735-0590

System Sensor - Australia
Ph: 61-3-54-281-172

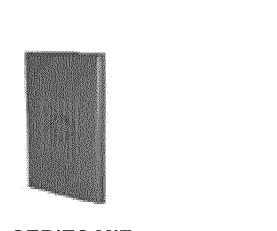
System Sensor - India
Ph: 91-124-621-7170
Ph: 91-124-621-3118

© 2002 System Sensor. The company reserves the right to change product specifications without notice. 405-0358-070-1/02-0803

wheelock^{inc.}

Helping People Take Action™
Helping People Take Action™

**SERIES MIZ MINI HORN
TEMPORAL (CODE 3) OR
CONTINUOUS TONE**



Description:

Wheelock Series MIZ piezoelectric Mini Horns are compact electronic alarm appliances that are listed under UL Standard 464 for Audible Appliances in Public Mode Fire Protection Systems. The MIZ-TC models offer field selectable settings for Temporal (Code 3) or Continuous Horn along with an attractive appearance and dependable performance. The Series MIZ offers high sound output along with low current draw and are ideal for alarm signaling in individual rooms, apartments, hotels, motels and offices. Color choices of red or off-white will blend with any decor.

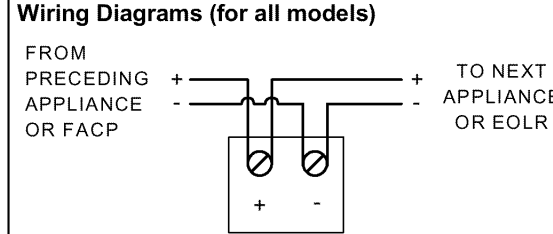
Applications:

- Individual Rooms
- Apartments
- Hotels
- Motels
- Offices

Features:

- Approvals include: UL Standard 464, California State Fire Marshal (CSFM), New York City (MEA), Pending: Factory Mutual (FM), and Chicago (BFP).
- Field selectable settings for Temporal (Code 3) or Continuous Horn.
- Designed to meet or exceed NFPA/ANSI standards.
- Convenient mounting to any standard single-gang box.
- No additional template required for flush mounting.
- Fast installation with in/out screw terminals using #12 to #18 AWG.
- High sound output / low current draw / low temperature compensation.
- Available in red or off-white color.

Wiring Diagrams (for all models)



Specifications and Ordering Information

Model	Order Code	Description	Mounting Options*
MIZ-TC24-R	8482	24 Volt Mini-Horn, Temporal or Continuous Horn Options-Red	B
MIZ-TC24-W	8483	24 Volt Mini-Horn, Temporal or Continuous Horn Options-White	B
MIZ-TC12-R	8480	12 Volt Mini-Horn, Temporal or Continuous Horn Options-Red	B
MIZ-TC12-W	8481	12 Volt Mini-Horn, Temporal or Continuous Horn Options-White	B

*Refer to Data Sheet S7000 for Mounting Options.

General Notes:

- Mini Horn models are listed for indoor use with a temperature range of 32° F to 120° F (0° C to 49° C) and maximum humidity of 95% RH.
- Rated input voltage (either filtered DC or unfiltered full-wave-rectified FWR): 16-33 VDC (for 24 VDC MIZ-TC models) or 8-17.5 VDC (for 12 VDC MIZ-TC models).

Copyright 2002 Wheelock Inc. All rights reserved.

Architects and Engineers Specifications

The notification appliance shall be a Wheelock Series MIZ-TC audible appliance or approved equal. The Notification Appliance shall be electronic and shall have field selectable settings for Temporal (Code 3) or Continuous Horn. The sound pressure measurement on Temporal (Code 3) setting shall be 87 dBA minimum at 24VDC and 85-dBA minimum at 12VDC. The sound pressure measurement on Continuous Horn setting shall be 87 dBA minimum at 24 VDC and 86 dBA minimum at 12 VDC. Operating voltages shall be either 24 VDC or 12 VDC using filtered power or unfiltered power supply (full-wave-rectified). All models shall have provision for standard reverse polarity type supervision and INOUT wiring using terminals that accept #12 to #18 AWG wiring. The appliances shall be mounted indoors and mount on standard electrical backboxes requiring no additional templates or adapters.

Model	Regulated Voltage		Rated Average Current		Reverberant dBA Per CAN/ULC-525-99 @ 10 ft		Anechoic dBA Per CAN/ULC-525-99 @ 10 ft		Mounting Options
	DC	RMS	Code 3	Code 3	Continuous	Code 3	Continuous	Code 3	
MIZ-TC12	8.0	10.5	.011	.017	77.8	73.3*	82.8	82.7	B
	12.0	12.0	.016	.025	80.9	76.8	86.3	85.9	
	17.5	15.6	.023	.035	83.9	79.8	89.9	89.7	
MIZ-TC24	16.0	20.0	.012	.027	79.7	75.5	84.8**	84.7**	B
	24.0	24.0	.017	.038	83.2	78.8	87.9	87.9	
	33.0	31.0	.024	.043	85.8	81.3	90.6	89.7	

NOTE: All CAUTIONS and WARNINGS are identified by the symbol. All warnings are printed in bold capital letters.

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 WARNINGS 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.

WARNING: CONTACT WHEELLOCK FOR THE CURRENT "INSTALLATION INSTRUCTIONS" (#23846) AND "GENERAL INFORMATION" SHEET (#23830) ON THESE PRODUCTS. THESE DOCUMENTS UNDERGO PERIODIC CHANGES. IT IS IMPORTANT THAT YOU HAVE CURRENT INFORMATION ON THESE PRODUCTS. THESE MATERIALS CONTAIN IMPORTANT INFORMATION THAT SHOULD BE READ BEFORE INSTALLING THESE PRODUCTS, INCLUDING:

- TOTAL CURRENT REQUIRED BY ALL APPLIANCES CONNECTED TO SYSTEM SECONDARY POWER SOURCES.
- FUSE RATINGS ON NOTIFICATION APPLIANCE CIRCUITS TO HANDLE PEAK CURRENTS FROM ALL APPLIANCES ON THESE CIRCUITS.
- THE VOLTAGE APPLIED TO THESE PRODUCTS MUST BE WITHIN THEIR RATED VOLTAGE RANGE.
- FAILURE TO COMPLY WITH THE INSTALLATION INSTRUCTIONS OR GENERAL INFORMATION SHEETS COULD RESULT IN IMPROPER INSTALLATION, APPLICATION, 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.
- CONDUCTOR SIZE (AWG), LENGTH AND AMPACITY SHOULD BE TAKEN INTO CONSIDERATION PRIOR TO DESIGN AND INSTALLATION OF THESE PRODUCTS, PARTICULARLY IN RETROFIT INSTALLATIONS.
- CAUTION: Audible Horn appliances are not designed to be used on coded systems in which the applied voltage is cycled on and off.

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).

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 SUPPORT AND ENCOURAGE NICET CERTIFICATION

MADE IN THE USA
3 YEAR WARRANTY

NATIONAL SALES OFFICE
800-513-2142
Canada 800-397-5777
E-Mail: Info@wheelockinc.com
<http://www.wheelockinc.com>

Distributed By:

NEMA

273 BRANCHPORT AVENUE • LONG BRANCH, NJ 07740 • TEL: 732-222-6880 • FAX: 732-222-2588
81700 08/02

Drawn By: A. EBY
Date: 09/20/02
Scale: NONE
Job No:
REVISIONS

REV.	DESCRIPTION	DATE
-		

Product
Data Sheets

FIRE ALARM SYSTEM
Sheet Number
FA-6.0
Glover Homes Project

Sample Drawings - Not For Distribution