

CONCEAL-ALARM

INFORMATION PACKET FOR
Fire Alarm System Contractors & Installers

An informative, technical guide for our Conceal-Alarm line of products.



202 Elk Street | PO Box 160
Elkton, SD 57026
Phone: (605) 542-4444
Fax: (605) 542-3333

www.concealite.com

Table of Content

Quick Reference: Important Items to Understand	2
Frequently Asked Questions	3
Technical Information: Current Draw	5
Wiring Diagrams	6
Fire Alarm Device List	8
List of Devices Offered / Part Numbers	9
Quotation Process	10

Quick Reference: Important Items to Understand

- ✓ The Conceal-Alarm series product family is compatible with all fire alarm panels.
- ✓ The Conceal-Alarm series product family interfaces with all fire alarm systems.
- ✓ The Conceal-Alarm series product family is ETL listed to UL standards UL1971, UL1480, and UL464.
- ✓ Units are furnished standard with Wheelock UL listed devices. A list of these devices can be found in this information packet.
- ✓ The Conceal-Alarm series product family conforms to NFPA 72 standards.
- ✓ Fire alarm devices must be installed and wired into the concealed enclosure at the factory; devices cannot be installed to the rotating door assembly in the field.
- ✓ Strobe intensity (candela settings) must be provided with the order information. Strobe intensity is set to your specific, requested settings at the factory. Strobe intensity cannot be field selected.
- ✓ Speaker voltage and wattage must be provided with the order information.
- ✓ Conceal-Alarm is Chicago approved. Documentation is available upon request. For more information, send an email to mike@concealite.com, with a subject line marked as *Chicago Approval Letter*.
- ✓ Conceal-Alarm is not currently listed by the CSFM (California State Fire Marshal).

Frequently Asked Questions

1. How is EOL monitoring/supervision affected?

EOL monitoring/supervision is the same as any standard ceiling or wall mounted device.

2. What devices are offered?

Units are furnished standard with Wheelock UL listed devices. A list of these devices can be found in this information packet.

3. How do I provide power to the Conceal-Alarm devices?

The Conceal-Alarm products are designed to operate directly from the NAC circuit.

4. Is a dedicated power supply for just the motor/clutch separate from the NAC circuit connected to the device?

Yes, each Conceal-Alarm product requires one input for the device; the other input is for the motor/clutch. Please see wiring diagrams contained herein.

5. Who can order the Conceal-Alarm products?

The Conceal-Alarm products are sold directly to approved Fire Alarm contractors and Fire System companies.

6. Are there any special applications that are required to become an authorized reseller?

Yes, please follow the Quote and Ordering Instructions listed herein.

7. What is the current draw of the Conceal-Alarm products?

General rule of thumb is a maximum of two (2) Conceal-Alarms per 2 amp NAC. Specifically, the motor and clutch draw 350 ma during the ½ second of operation to open the door. However, both motor and clutch are inductors ... initial current draw can spike to around 900 ma for a fraction of a second. This peak current inrush

can/could cause power supplies to shut down under the control of the over-current protections built into some power supplies.

For (alarm mode only) battery calculations, the clutch is the only additional draw (plus the device itself) once the door has opened. The clutch draws 100 ma continuously while the panel is activated, if powered by a listed fire alarm panel power supply.

8. Does the current draw the same on both sizes of Conceal-Alarm, i.e., FA900 and FAFX models?

Yes, the current draw is the same on all models.

9. Does the Conceal-Alarm product cause any issues with strobe synchronization?

No, the motor and clutch are electronically isolated from the device itself.

10. Is the Conceal-Alarm product listed by the CSFM?

No, at this time this product is not California State Fire Marshal listed.

11. Is the Conceal-Alarm a new product? How many years has this product been available? Is this product widely recognized and found to be acceptable?

Conceal-Alarm is properly listed to serve fire alarm notification requirements as per NFPA 72. Conceal-Alarm's classification of use is fire alarm for UL notification devices and is appropriately listed as a notification appliance under all three of the applicable fire alarm appliance listing numbers, UL 464, UL 1480 and UL 1971. Conceal-Alarm products were initially listed to conform to testing criteria developed exclusively by Underwriters Laboratories, Inc. Concealite's Conceal-Alarm product successfully met, or exceeded, all testing requirements. Conceal-Alarm is currently ETL listed to UL 464, UL 1480, and UL 1971.

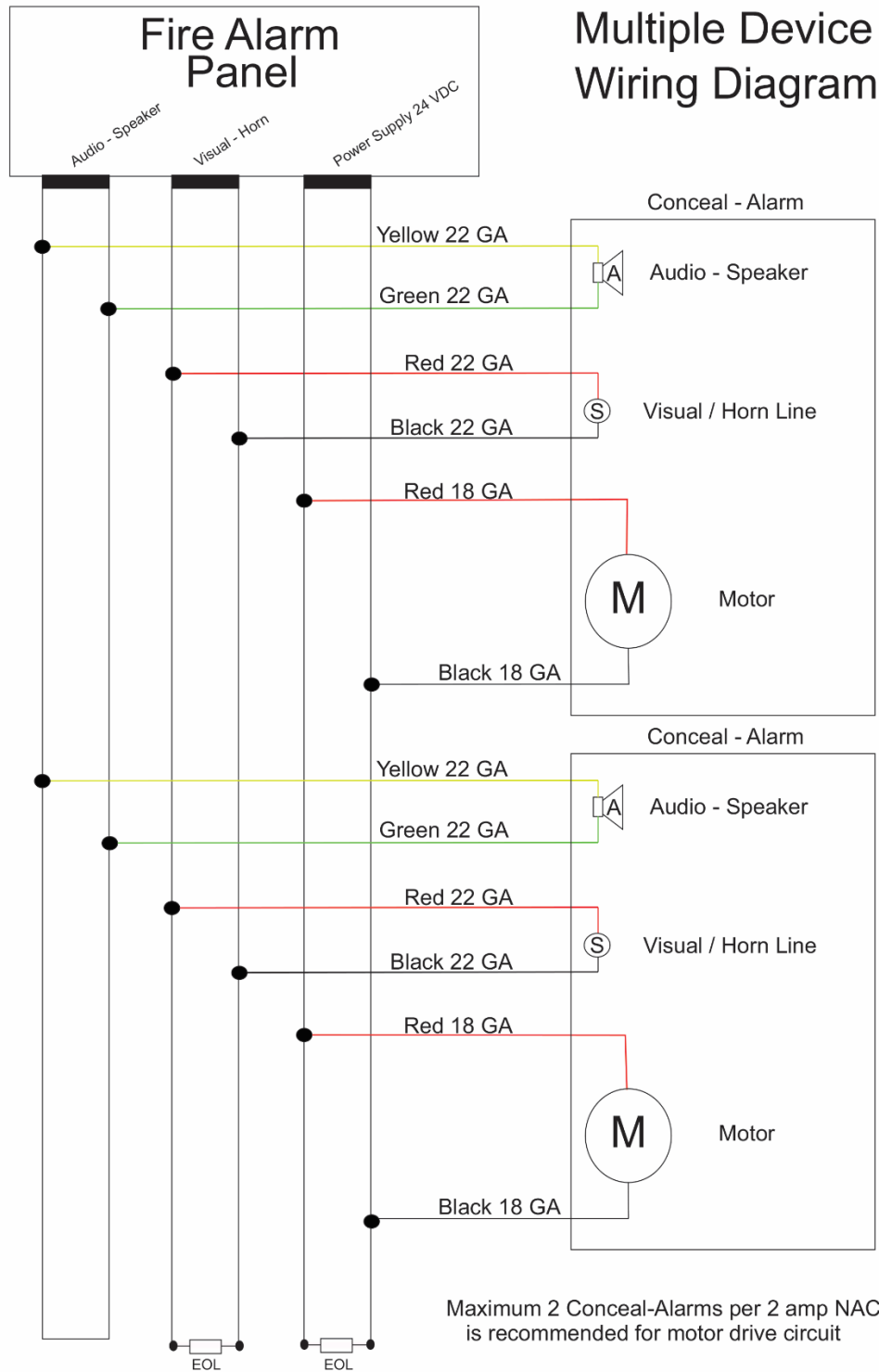
Conceal-Alarm products have been installed throughout the USA for 25+ years. Concealite's Conceal-Alarm installations include the very highest profile and historic sites including Courthouses, State Capitols, George Washington's Mount Vernon, CIA Headquarters, IMF Building, and the White House.

Technical Information: Current Draw

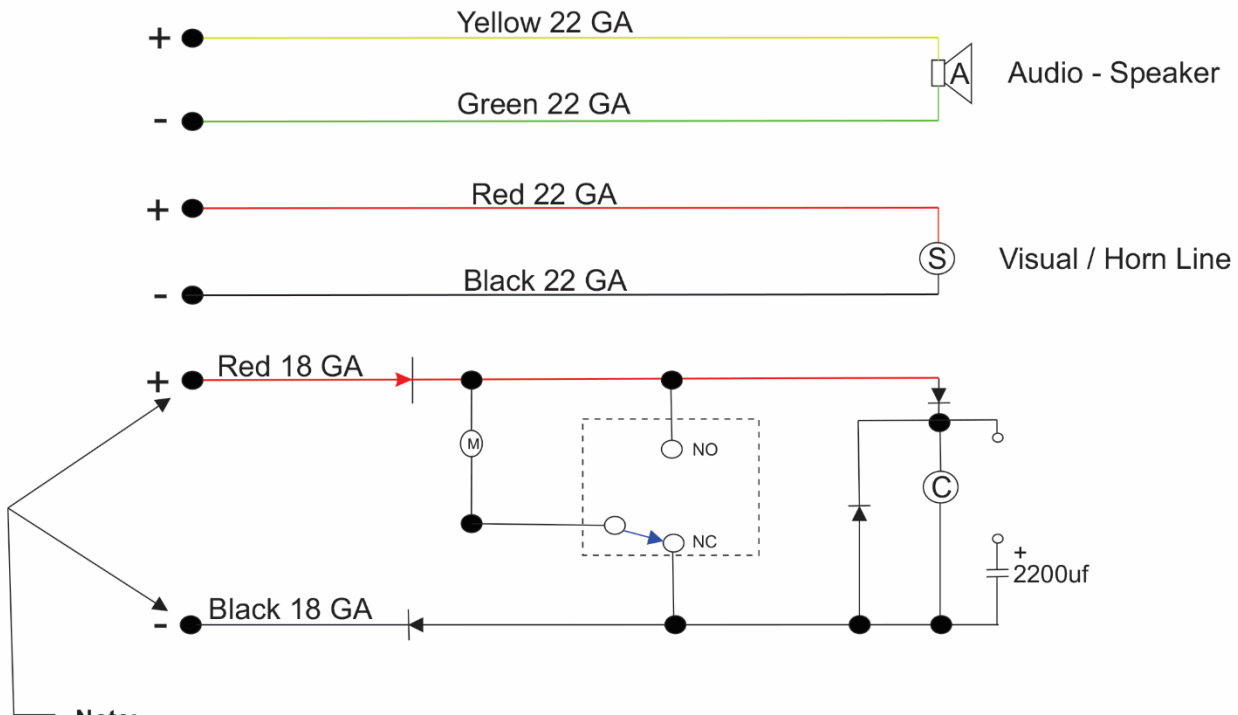
General rule of thumb is a maximum of two (2) Conceal-Alarms per 2 amp NAC. Specifically, the motor and clutch draw 350 ma during the ½ second of operation to open the door. However, both motor and clutch are inductors ... initial current draw can spike to around 900 ma for a fraction of a second. This peak current inrush can/could cause power supplies to shut down under the control of the over-current protections built into some power supplies.

For (alarm mode only) battery calculations, the clutch is the only additional draw (plus the device itself) once the door has opened. The clutch draws 100 ma continuously while the panel is activated, if powered by a listed fire alarm panel power supply.

Wiring Diagrams








Fire Alarm Wiring Diagram - Standard



Note:
Route to fire alarm control system power supply.
Motor to be powered under alarm mode condition ONLY.

Note:Circuit polarity shown in alarm mode

- Legend:**
- Speaker 
 - Horn and/or Strobe 
 - 24VDC Motor 
 - 24 VDC Electric Clutch 
 - Diode 

Note:This diagram demonstrates all possible wiring combinations: Please choose the appropriate wires to attach to the leads provided from the fire alarm panel. All units will utilize a minimum 18 ga Red & Black conductor for the motor. Use minimum 22 ga Red & Black for a strobe or horn/strobe, the 22 ga Yellow & Green for a speaker only, all 22 ga leads are required for a speaker/strobe.

Fire Alarm Device List

Compatible Devices & List of Devices Offered

- ❖ Conceal-Alarm is a concealed solution for most any fire alarm device application, such as strobe, horn, speaker, or combination thereof.
- ❖ The Conceal-Alarm products are designed and listed to operate directly from the NAC circuit.
- ❖ Fire Alarm Devices must be installed and wired into the concealed enclosure at the factory; devices cannot be installed to the rotating door assembly in the field.
- ❖ Strobe Intensity (Candela settings) must be provided with the order information. Strobe intensity is set to your specific requested settings at the factory. Strobe intensity cannot be field selected.
- ❖ Speaker voltage and wattage must be provided with the order information.
- ❖ The Conceal-Alarm series is available in two (2) sizes of concealed enclosure. The size of the enclosure is largely determined by the size of the fire alarm device utilized. These sizes cover wall and ceiling applications using strobe, horn, speaker, or combination thereof. These sizes are denoted as series FA900 and FAFX. For specifics on dimensions and further product specifications, please review the product family cut sheets for the FA900 and FAFX products.

List of Devices Offered / Part Numbers

NOTE: Concealite uses Wheelock devices in all our Conceal-Alarm line of products.

FA-900

Device Type	Color	Application	Part Number
Speaker Strobe	Red, High CD	Wall	FA900-W-ELSPSTR
Speaker Strobe	White	Wall	FA900-W-ELSPSTW
Speaker Strobe	White, High CD	Wall	FA900-W-ELSPSTW
Speaker Only	Red	Wall	FA900-W-ELSPKR
Speaker Only	White	Wall	FA900-W-ELSPKW
Horn Only	Red	Wall	FA900-W-ELHNR
Horn Strobe	Red	Wall	FA900-W-ELHSR
Horn Strobe	White	Wall	FA900-W-ELHSW
Strobe Only	Red	Wall	FA900-W-ELSTR
Strobe Only	White	Wall	FA900-W-ELSTW

FAFX

Device Type	Color	Application	Part Number
Speaker Strobe	Red	Ceiling	FAFX-C-ELSPSTRC
Speaker Strobe	White	Ceiling	FAFX-C-ELSPSTWC
Speaker Strobe	Red, High CD	Ceiling	FAFX-C-ELSPSTRC
Speaker Strobe	White, High CD	Ceiling	FAFX-C-ELSPSTWC
Speaker Only	White	Ceiling	FAFX-C-ELSPKWC
Horn Only	White	Ceiling	FAFX-C-ELHNWC
Horn Strobe	Red	Ceiling	FAFX-C-ELHSRC
Horn Strobe	White	Ceiling	FAFX-C-ELHSWC
Strobe Only	Red	Ceiling	FAFX-C-ELSTRC
Strobe Only	White	Ceiling	FAFX-C-ELSTWC

Quotation Process

A free Quote for our Conceal-Alarm products can easily be obtained by visiting our website at www.Concealite.com and clicking on the link at the top of the page called “Quotes.” On the “Get a Quote” page, simply click on the link called “Fire Alarm Products Quote.” You should now be located on the “Fire Alarm Quote Request for Contractors/Installers” page. Here, we’ll need you to fill in as much information as you can provide to us. All fields marked with a star are required. When done filling in the blanks, simply click the “Request Quote” button and someone will email you a Quote within a couple hours, during normal business hours.

Part Numbers ... used for requesting a Quote ... can be obtained by visiting the “List of Devices Offered / Part Numbers” section of this document.

All Quotes requested at our website are sent via email to you from **quotes@concealite.com**. Please *make sure this email address is listed as a friendly email address* on your end so that you can receive the Quote. If you do not receive a Quote within a couple hours, during normal business hours, please check your Junk/Spam folder for the Quote. If you cannot find the email containing the Quote, please call us at (605) 542-4444 and someone will help you obtain your Quote.