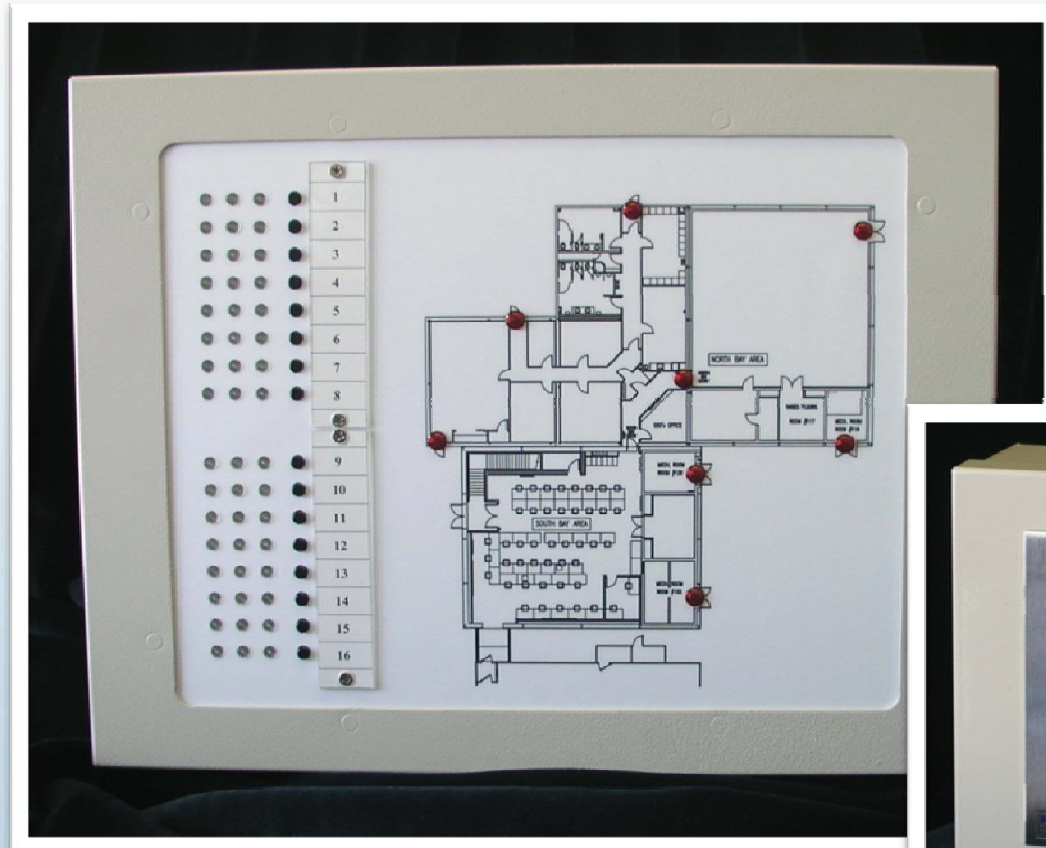


# Flair 500 Series Annunciators



# Annunciator Basics

Flair **Multi-Zone Annunciators (MZAs)** are fully functional, flexible, programmable micro controller based alarm control panels. They can be used independently or in conjunction with other control panels and access control systems.

Typical applications include alarm systems where there are guards, officers, nurses or other personnel who need to monitor doors, rooms, objects or people quickly without having to scroll through LCD screens or computers

## FEATURES

- 8 Zone Modular Design
- Micro Controller Based
- Highly Visible Display
- Single Touch Control
- Easily Programmable

# User Interface

The Basic 8 Zone Annunciator Module consists of 8 each, Yellow, Green, Red LEDs, and 8 Tactile Switches.

**Yellow LED** Indicates if the corresponding Zone is Bypassed.

ON = Bypassed

**Green LED** Indicates the Status of the Zone Input in real-time.

ON = Zone Secure

OFF = Zone Faulted

Flashing = Zone Trouble

**Red LED** Indicates a Zone Alarm.

Flashing = New Alarm

Steady = Acknowledged Alarm

**Tactile Switch** Provides for Individual Zone Control

Acknowledge (Press Once)

Reset (Press Once after Ack.)

Bypass (Hold for 1 ½ seconds)

Typical 8 Zone Display



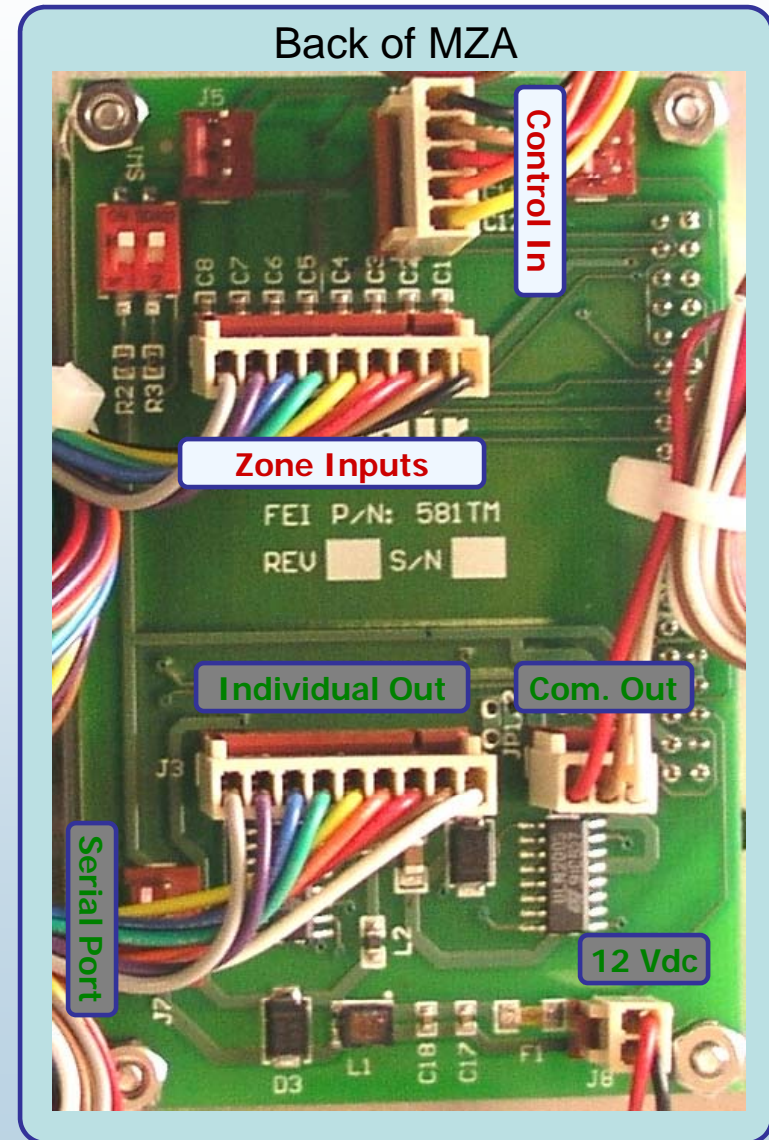
# Inputs of the MZA

Zone Inputs – Consist of eight Supervised Loop Inputs with one Common. Zone Inputs may be independently programmed for any one of five Input Types.

- N.C./N.O.
- N.C.
- N.O.
- Fire
- High Security

Control Inputs – Consist of four Digital Control Inputs with one Common. Control Inputs may be independently programmed for any one of six Control Types

- Acknowledge
- Reset
- Shunt Disable
- Shunt Disable w/ Memory
- Arm/Disarm
- Lamp Test



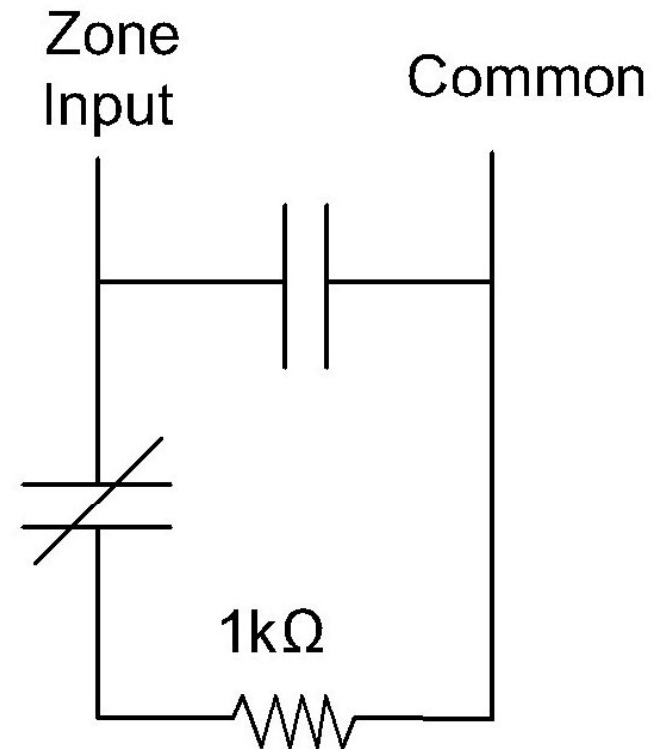
## N.C./N.O - Zone Input Configuration

For use with N.C. and or N.O. contacts.

N.C/N.O. EOL Zones must have a 1000 Ohm resistor across them.

If the Zone is Shorted or Open, it will Alarm, there is no Trouble condition.

Resistors should always be placed at the end of the wire run.



Normally Closed and Normally Open Contact with EOL resistor

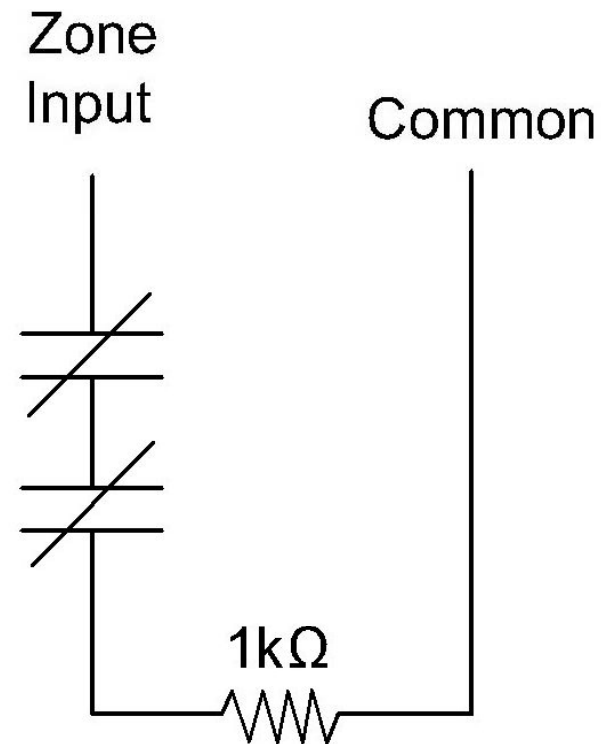
# N.C. - Zone Input Configuration

For use with N.C. contacts.

N.C. EOL Zones must have a 1000 Ohm resistor across them.

An Open Zone will generate an Alarm condition.

A Shorted Zone will generate a Trouble condition.



2 Normally Closed Contacts  
with a single EOL Resistor



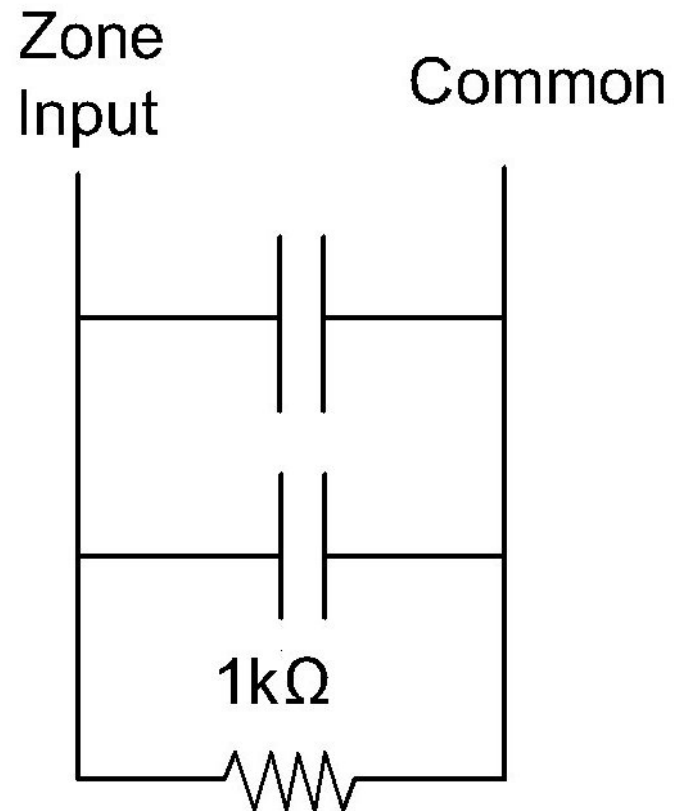
## N.O./Fire - Zone Input Configuration

For use with N.O. Contacts.

N.O. EOL Zones must have a 1000 Ohm resistor across them.

A Shorted Zone will generate an Alarm condition.

An Open Zone will generate a Trouble condition.



2 Normally Open Contacts  
with a single EOL Resistor

# High Security - Zone Input Configuration

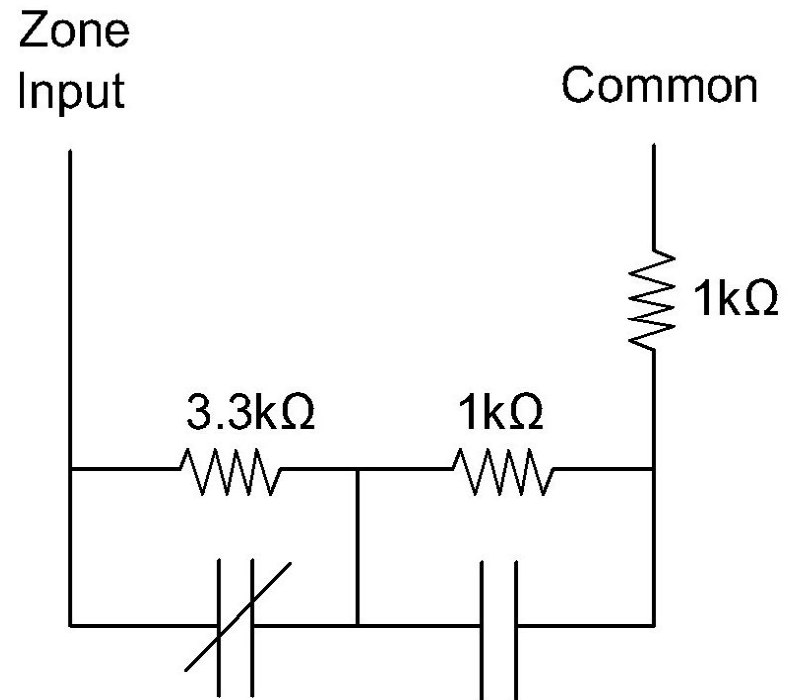
High Security EOL Zones monitor for 7 different Loop Resistance Ranges.

Secure Loop = 2000 Ohms

Alarm Loop = 5300 Ohms

Magnetic Tamper = 1000 Ohms

Loop Tamper = Short, Open and ranges above and below the Secure Loop Resistance



High Security Balanced Magnetic Contact with EOL Resistor Network to sense Door position, Magnetic Tamper, Electrical Tamper and Trouble



# Outputs of the MZA

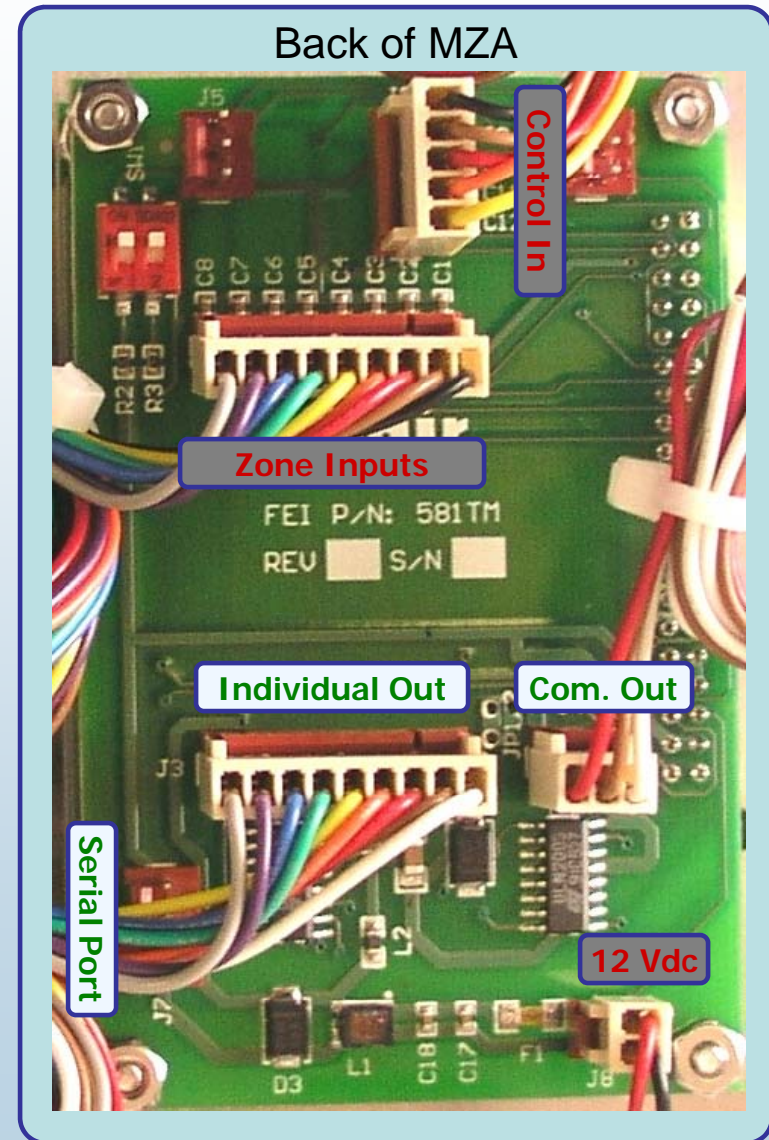
Individual Outputs – Consist of eight Open Collector Transistor Outputs, each with a maximum switch current of 100mA 24VDC. Individual Outputs may be programmed for any one of five Output Types

- Non-Latch
- Latched
- Pulsed
- Timed
- Sounder

Common Outputs – Consist of two Open Collector Transistor Outputs, each with a maximum switch current of 100mA 24VDC, typically factory wired to an Audible Sounder and Common Relay Output.

Common Outputs may be programmed for any one of six Output Types

- Non-Latch
- Latched
- Pulsed
- Timed
- Sounder
- System Arm



# Zone Output Configurations

The 8 Individual Outputs act as a switch to ground and may be connected to a small audible device, LED lamp, low current relay w/ surge diode, input of a digital device (PLC, Digital Dialer, Alarm Panel, or PC) etc...

Non-Latch – Follows the Status of the Zone Input, automatically resetting when the Zone Input is Secure.

Latched – Output will remain activated upon Alarm until the Zone Input is Secure and the Zone has been Acknowledged and Reset.

Pulsed – Output will activate upon Alarm for a 3 Second Period, each time the Zone Input is Alarmed.

Timed – Output will activate upon Alarm for a pre-programmed Time Period, then Automatically Reset.

Sounder – Output will activate upon Alarm and remain on until the Zone has been Acknowledged.

# Configuring the MZA

Characteristics of the Inputs and Outputs of each MZA Module are easily configured with the use of the Flair one page MZA Configuration software.

- Input Types
- Entry/Exit Delays
- Door Prop Delays
- Output Types
- Output Mapping

The screenshot shows the 'Flair MZA Configurator' software window. At the top, it displays the Flair Security Products logo and 'MZA Factory Settings' including Customer Num, Hardware S/N, Hardware Rev, Electronic S/N, Firmware Ver, and Date Code. A green text box on the right instructs: 'Connect and power MZA while holding MZA Serial Button. Then press Read EE Button'. The main area is titled 'MZA Attributes' and contains a table for configuring 8 zones. Each zone has settings for Loop Input Type, 24 Hour, Entry (Sec), Exit (Sec), Prop Delay (Sec), Output Type, and Output (Min). Below the table are 'Module Settings' for MZA Mode, Comm Channel, Module Link Address, and Slot Position. On the right side, there are settings for Digital Input 1-4 Type and Output Type/Output (Min) for Common 1 and 2. A red-bordered box highlights the 'Input Bridging to Zone Outputs' matrix, which maps 8 inputs to 8 outputs. At the bottom, there are status indicators for COM Port, COM Open, MZA Unlocked, and buttons for 'Change COM', 'Change Code', 'Unlock WriteEE', 'Read EE', 'Write EE', and 'Exit Program'. The version is 1.03.00 and it is 'Made in the USA'.

Zone	Loop Input Type	24 Hour	Entry (Sec)	Exit (Sec)	Prop Delay (Sec)	Output Type	Output (Min)
Zone 1	N.C./N.O.	<input type="checkbox"/>	0	0	0	Non-Latch	0
Zone 2	N.C./N.O.	<input type="checkbox"/>	0	0	0	Non-Latch	0
Zone 3	N.C./N.O.	<input type="checkbox"/>	0	0	0	Non-Latch	0
Zone 4	N.C./N.O.	<input type="checkbox"/>	0	0	0	Non-Latch	0
Zone 5	N.C./N.O.	<input type="checkbox"/>	0	0	0	Non-Latch	0
Zone 6	N.C./N.O.	<input type="checkbox"/>	0	0	0	Non-Latch	0
Zone 7	N.C./N.O.	<input type="checkbox"/>	0	0	0	Non-Latch	0
Zone 8	N.C./N.O.	<input type="checkbox"/>	0	0	0	Non-Latch	0

Inputs	1	2	3	4	5	6	7	8
Input 1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Input 2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Input 3	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Input 4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Input 5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Input 6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Input 7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Input 8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

# Output Mapping

## Input to Output Mapping

Any Outputs may be configured to operate with any individual Input or combination of Inputs.

Connect Multiple Zones to a Single Output for control of:

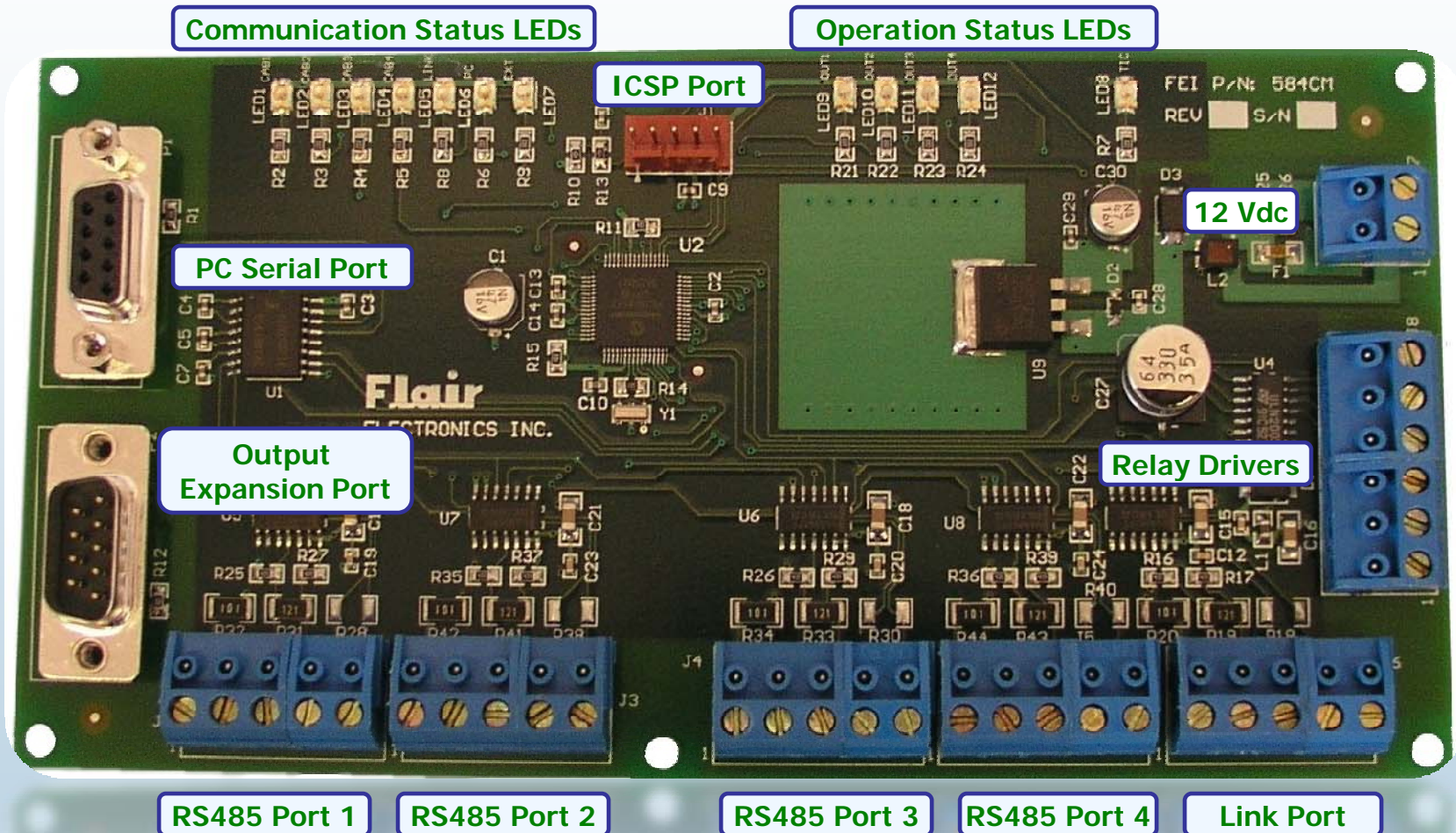
- Digital Dialers
- Camera Switchers
- DVR's
- Voice Annunciators
- Lighting
- Sirens

	<u>Input Bridging to Zone Outputs</u>							
Outputs:	1	2	3	4	5	6	7	8
Input 1:	■	□	□	□	□	□	□	□
Input 2:	□	■	□	□	□	□	□	□
Input 3:	□	□	■	□	□	□	□	□
Input 4:	□	□	□	■	□	□	□	□
Input 5:	□	□	□	□	■	□	□	□
Input 6:	□	□	□	□	□	■	□	□
Input 7:	□	□	□	□	□	□	■	□
Input 8:	□	□	□	□	□	□	□	■

Made in the USA



# Communication Module



# Communication Module Basics

The **Communication Module (CM)** is an accessory to the Annunciator that controls and routes RS485 Serial Communication between two or more Annunciator Cabinets

**Local/Remote** – The CM can be used to connect a Local Annunciator Cabinet to one or more Remote Annunciator Cabinets, each with complete display and control of the Local Zones.

## FEATURES

- Multiplex up to 512 Zones
- Micro Controller Based
- Easily Programmable
- Individual Status LEDs

## RS485 Ports

- Each CM has four – RS485 Ports to connect up to four Annunciator Cabinets in Local/Remote Configuration, with one Cabinet on each of the four RS485 Ports.
- Local Cabinets are typically hard wired to sensors in the surrounding building and display the status of those inputs. Remote Cabinets provide visual display and control of a Local Cabinet at one or more other locations.
- Each RS485 Port can be configured as either Local or Remote. A Local Cabinet may be routed to several Remote Cabinets. A Remote Cabinet may only be routed to one Local Cabinet.



## CM Link Port

- The CM Link Port can be used to connect two Communication Modules together, in order to expand the number of Local/Remote Cabinets multiplexed to eight and/or to Link Local/Remote Cabinets over the Internet or a wireless transceiver.

## PC Serial Port

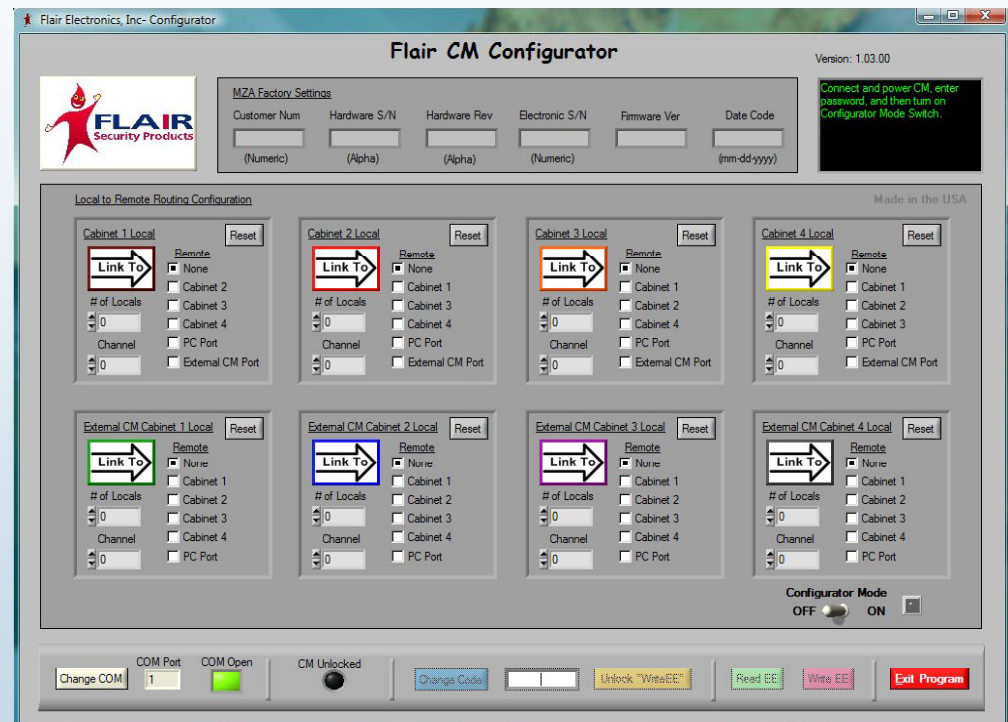
- The PC Serial Port is used to Configure the CM using a standard PC with an RS232 Serial Port.

# Configuring the CM

The Communication Module is easily configured with a standard PC, via the PC Serial Port, using the Flair one page CM Configuration Software.

## Configurable Features:

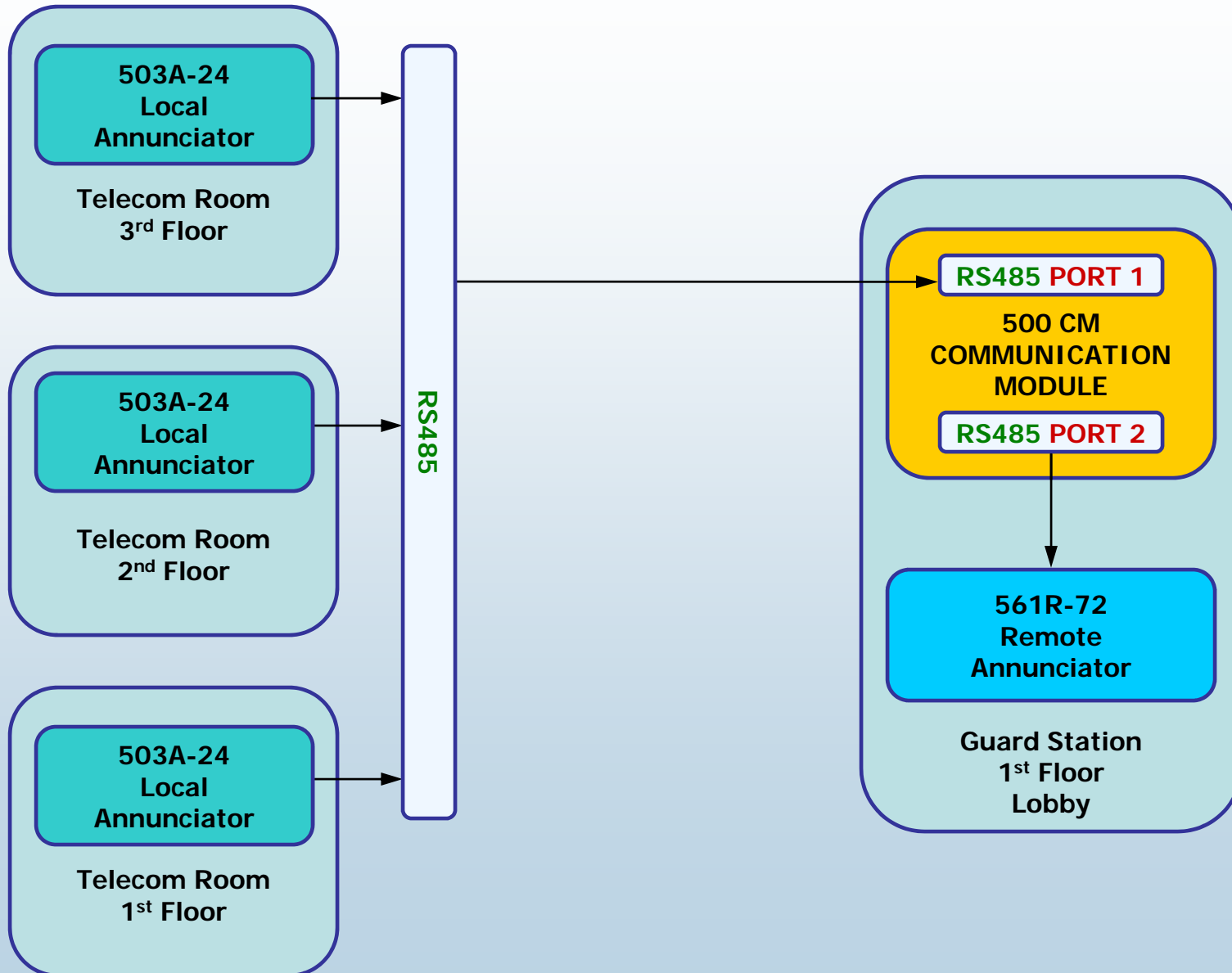
- Routing of Local Annunciator Cabinet to one or more Remote Annunciator Cabinets.
- Output Expansion Port Features
- Virtual MZA
- CM Link Port Routing



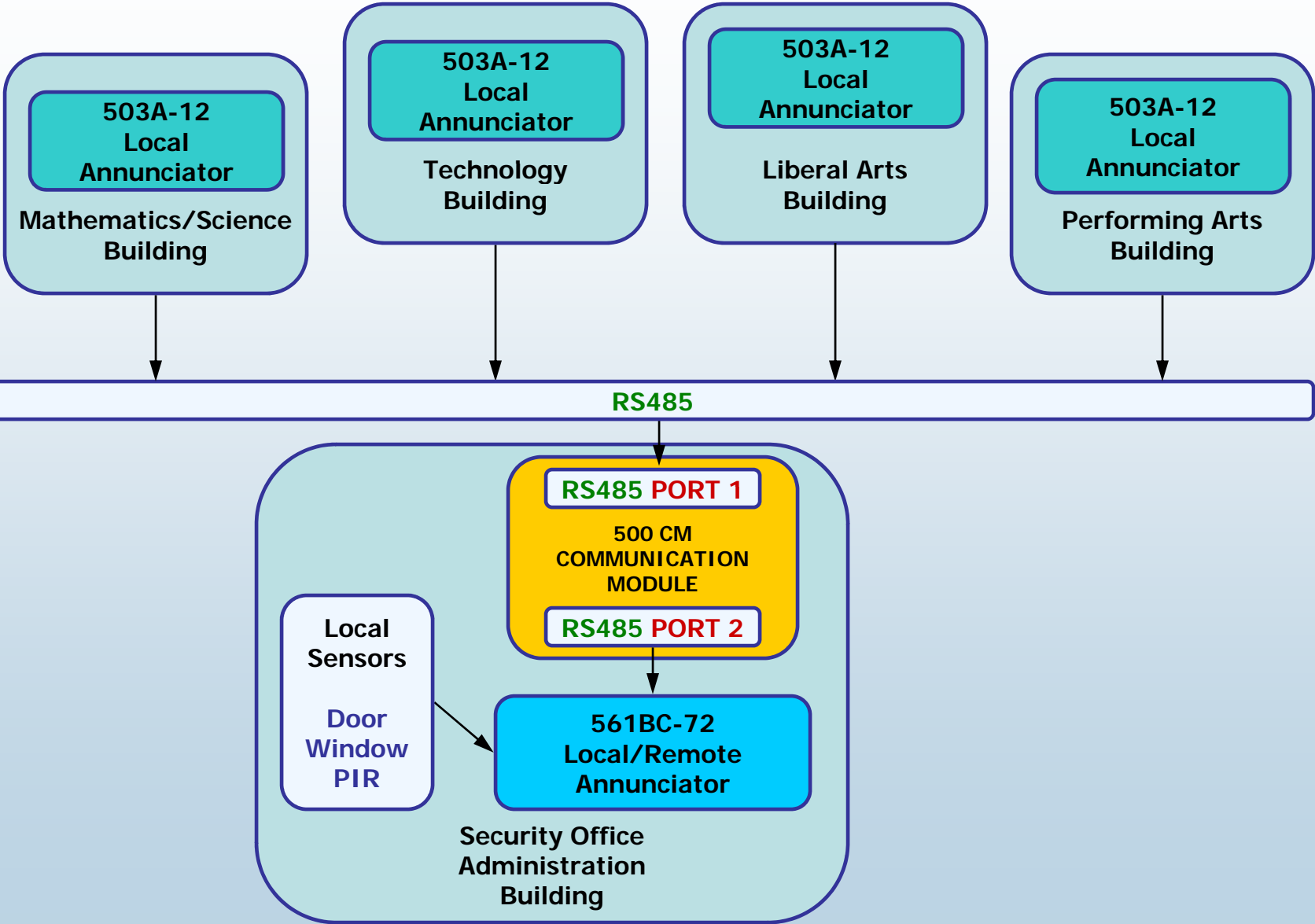
# Application Profiles

- Social Services Duress Alarm
- School/University Alarm
- Estate
- Upgrade/Retro-fit Existing Alarm Panel
- Access Control

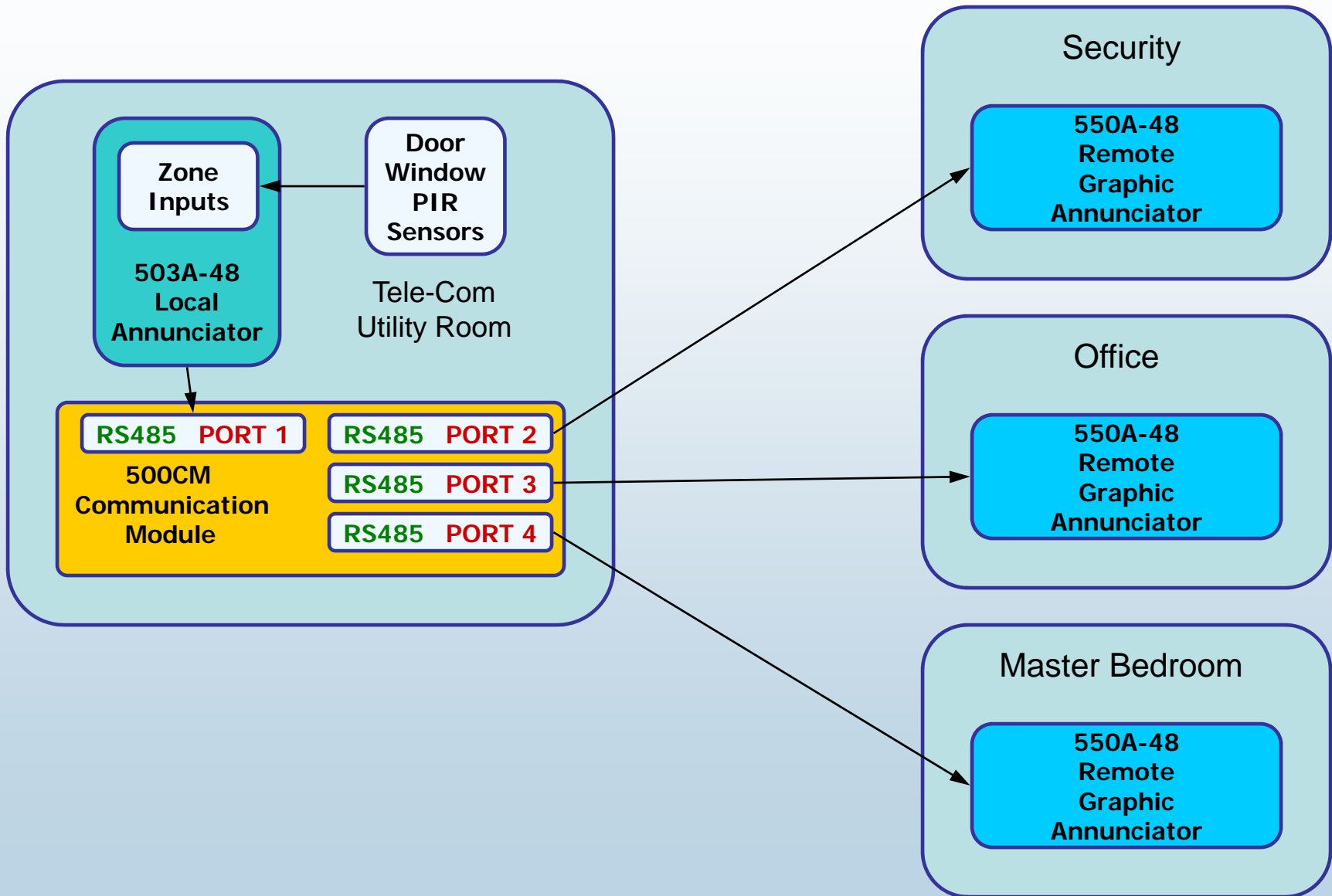
# Social Services Duress Alarm



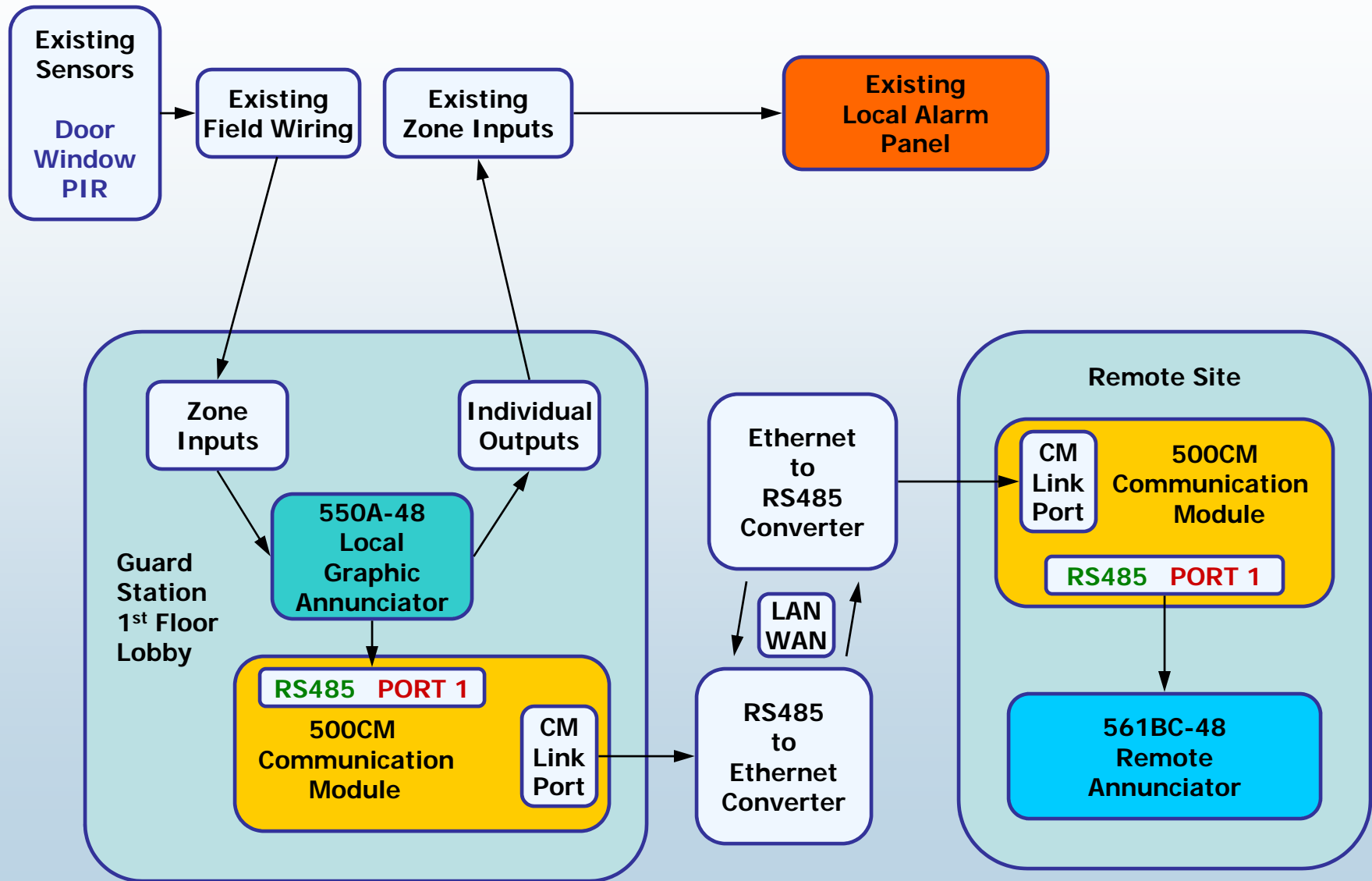
# School/University Alarm



# Estate

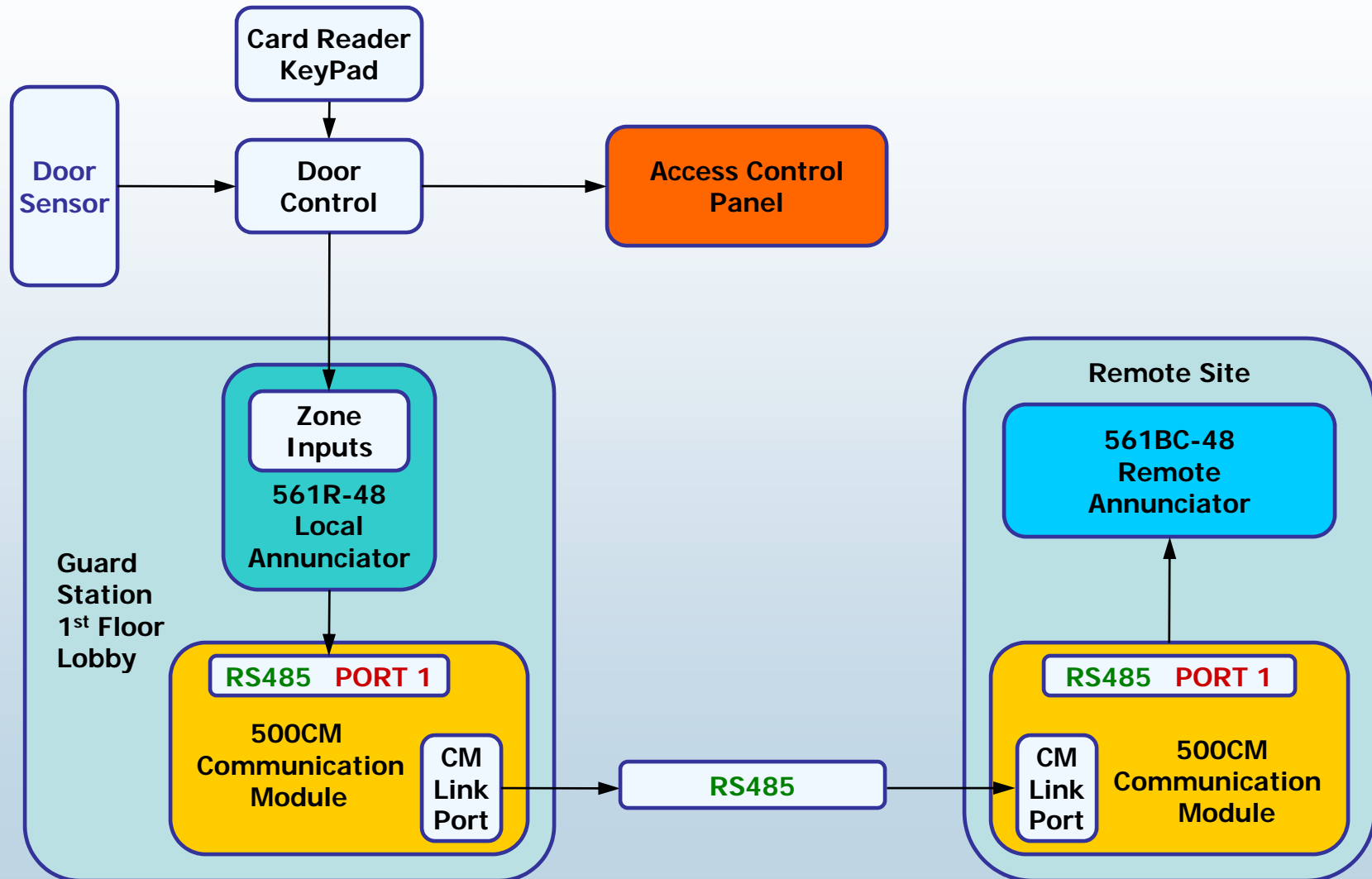


# Upgrade/Retro-fit Existing Alarm Panel





# Access Control



# Simple Access Control

