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RISCO University

RISCO GROUP

Creating Security Solutions, With Care

LightSYS™ 2 v5.64

Advanced Configurations

Lesson Objectives

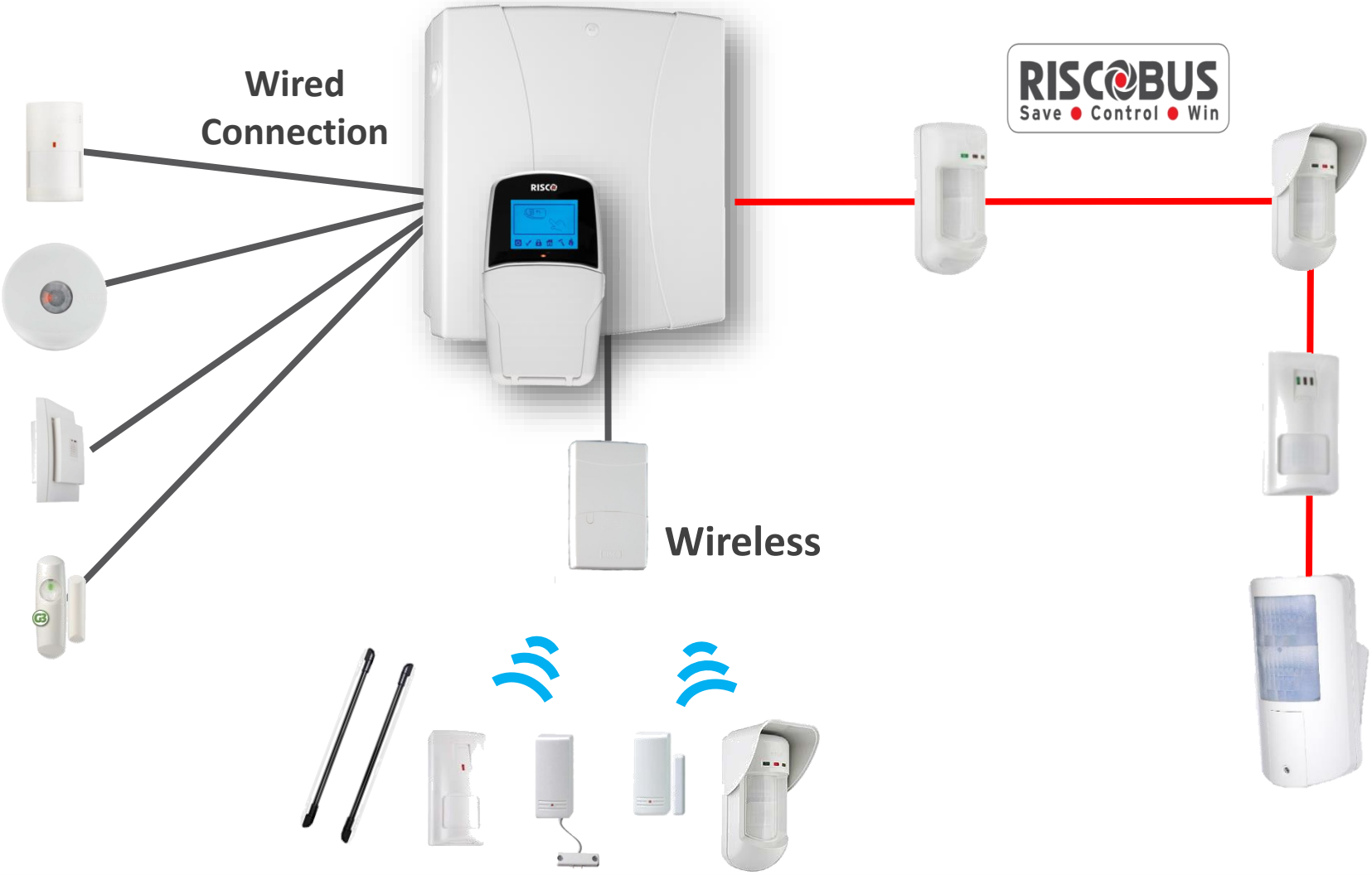
By the end of this lesson, you will be able to…

- Explain the correct method to install EOL Resistors
- Define the ID numbers of BUS Devices
- Explain the RISCO BUS main features
- Explain Smartphone Application main tabs

Agenda

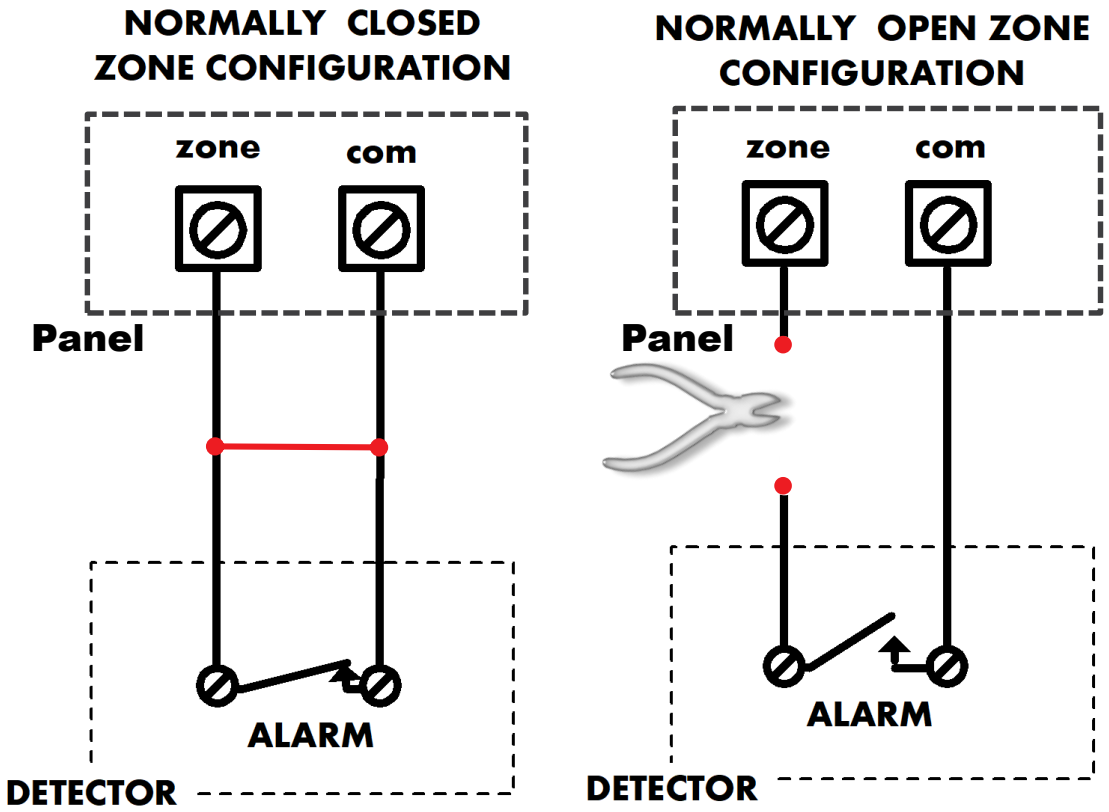
- LightSYS 2 - Wired Connections
- RISCO BUS
- Smartphone Application

LightSYS 2 System Flexibility



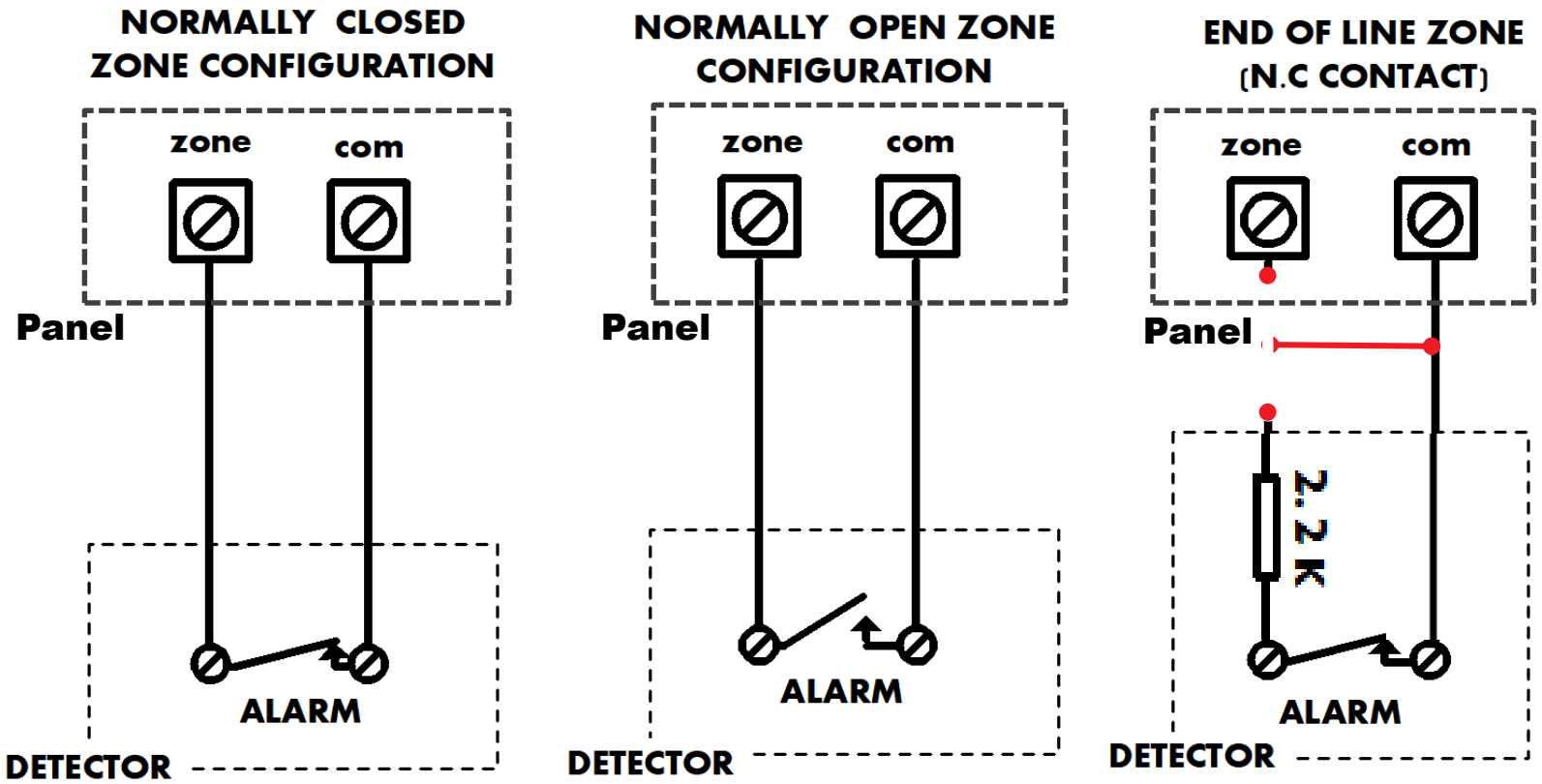
Zone Inputs Connections

No Indication in the System

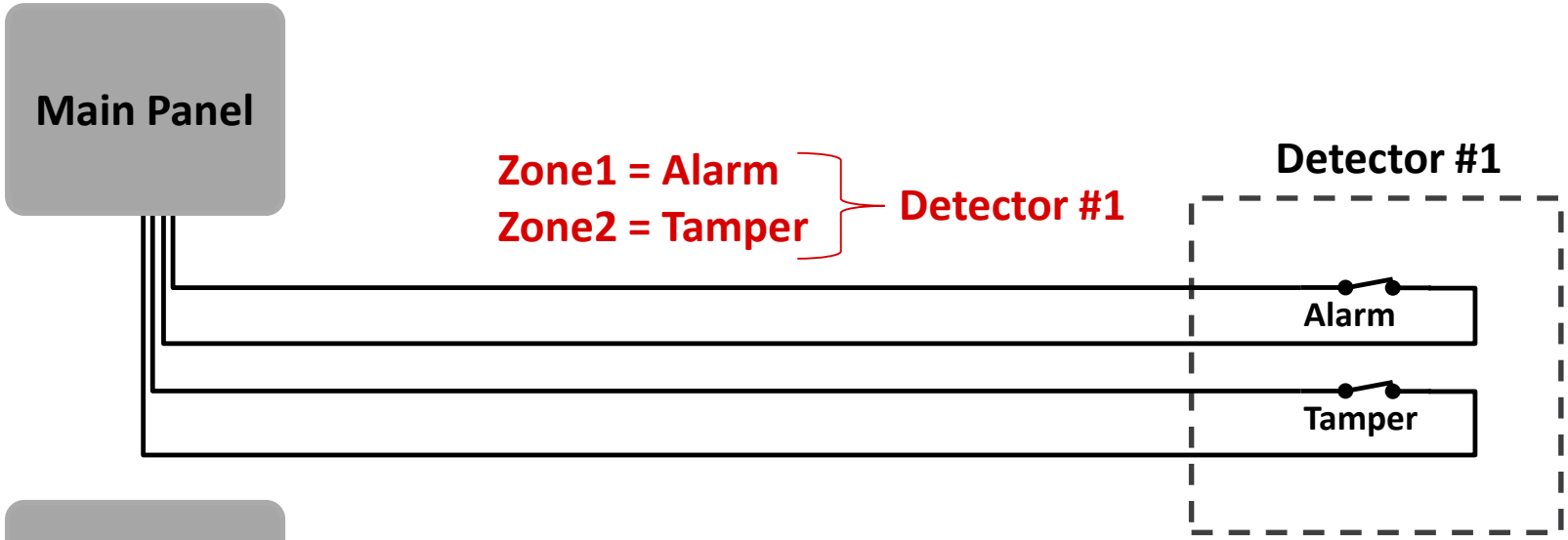


End Of Line Zone

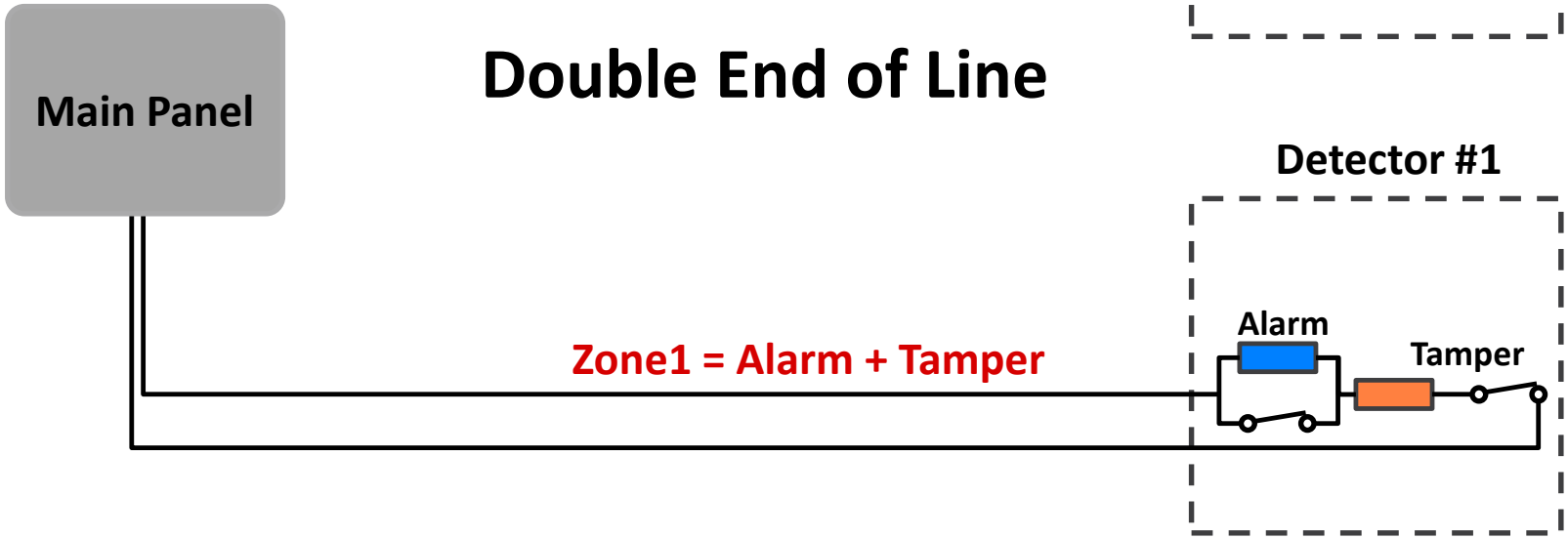
Detector Resistance = ∞



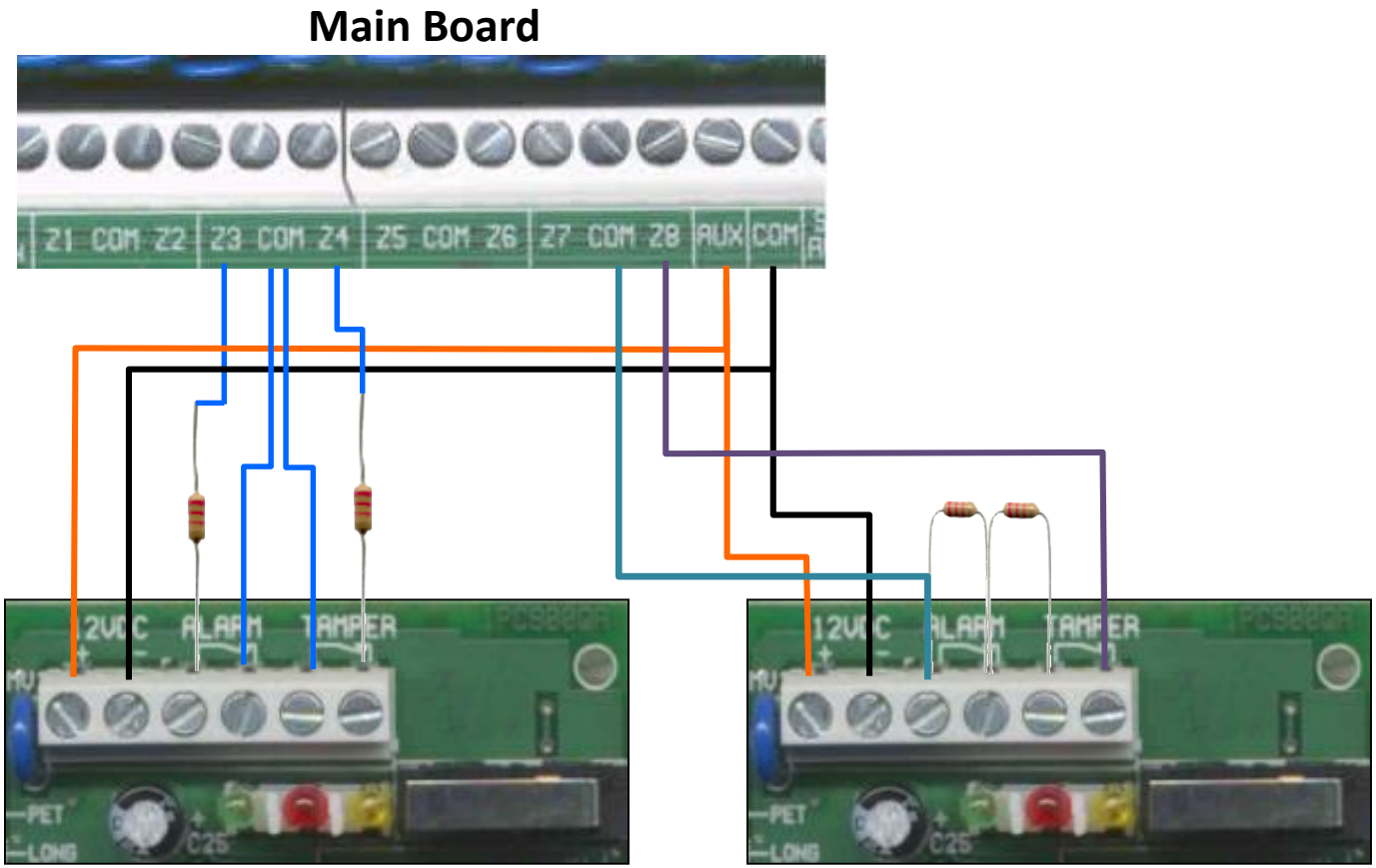
Tamper Connection Limitation & Solution



Double End of Line



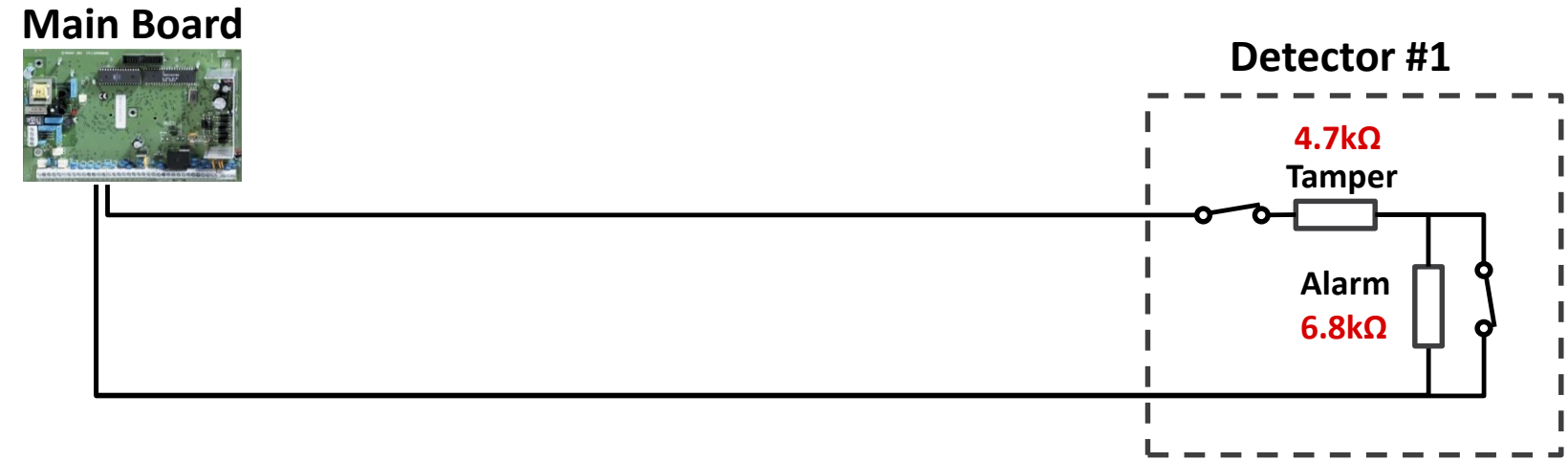
Double End of Line (DEOL) Connection

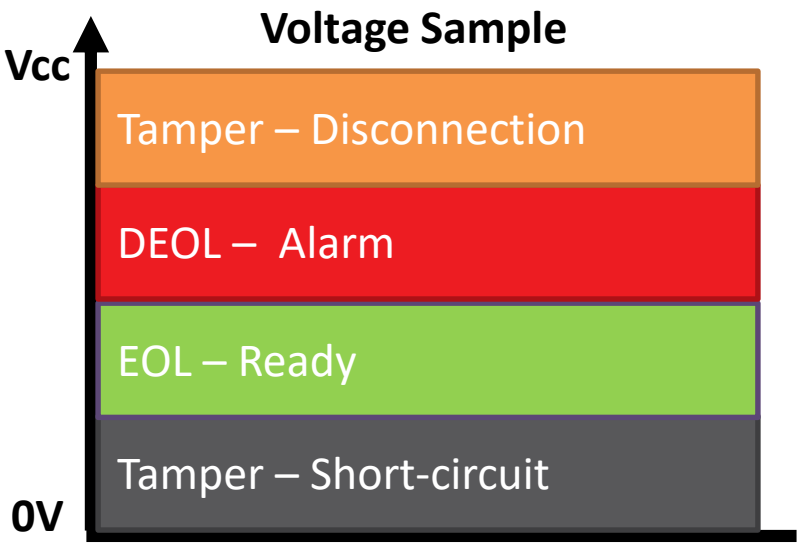


Detectors EOL Termination

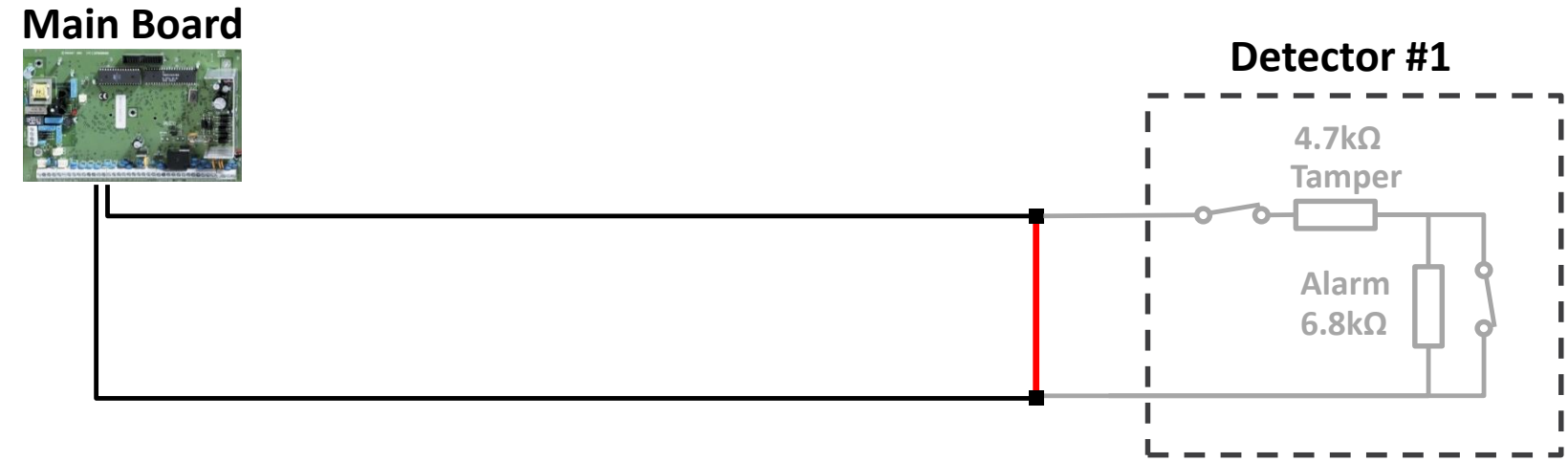
Detectors DEOL Termination

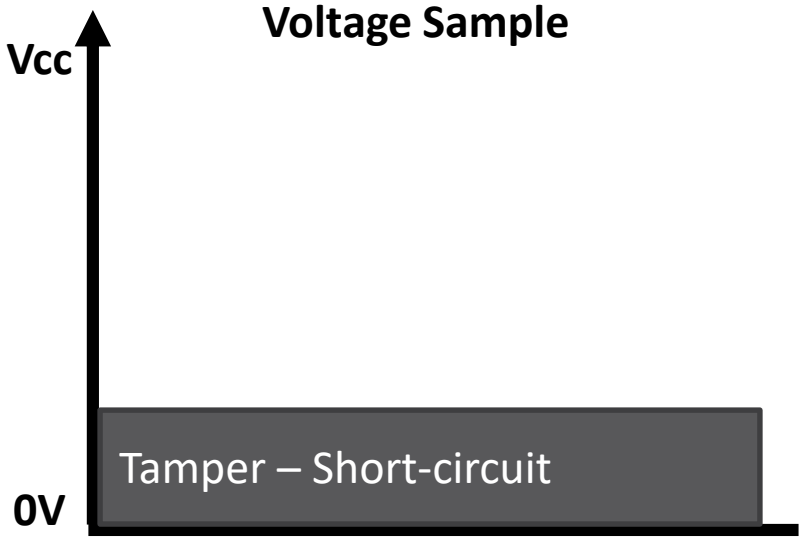
DEOL – Voltage Sampling in LightSYS



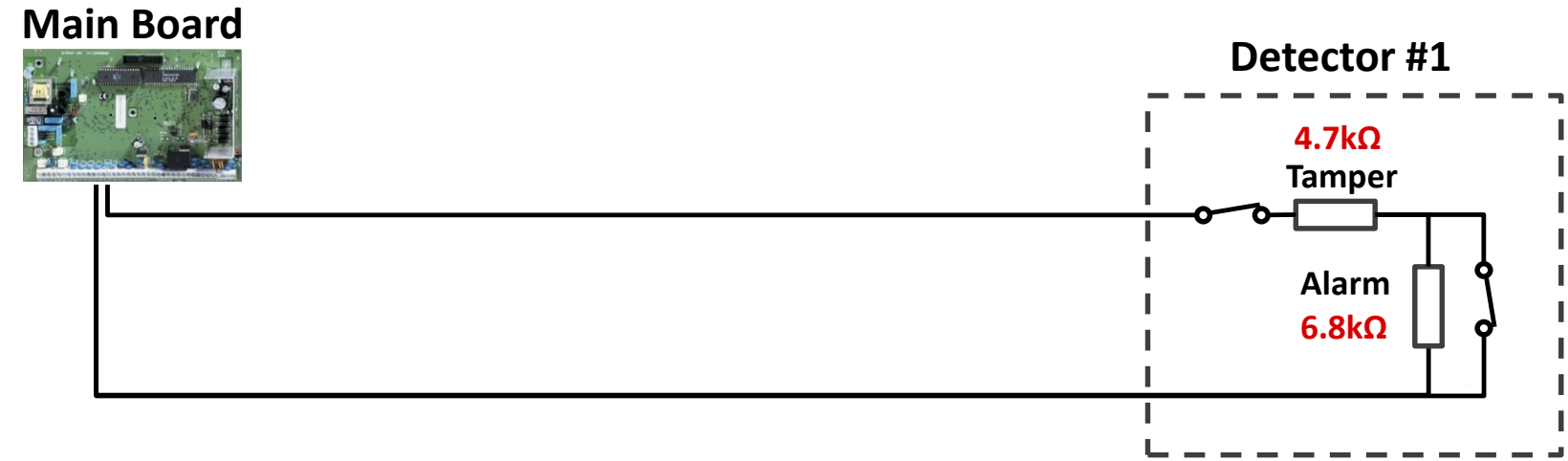


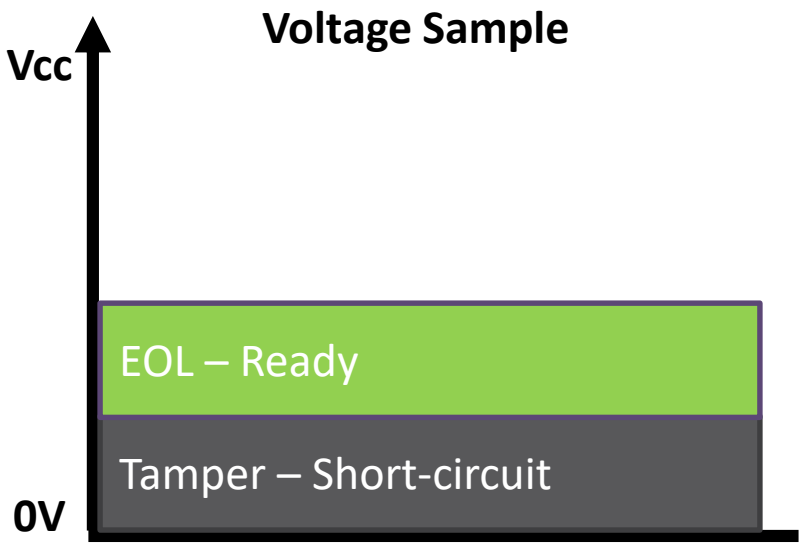
DEOL – Voltage Sampling in LightSYS



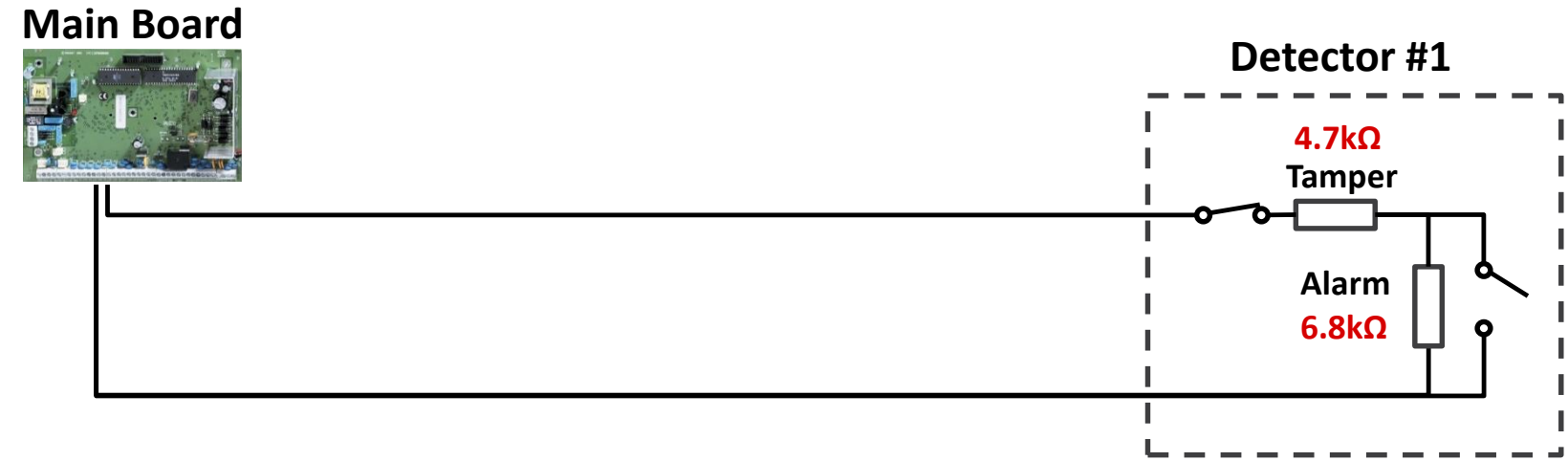


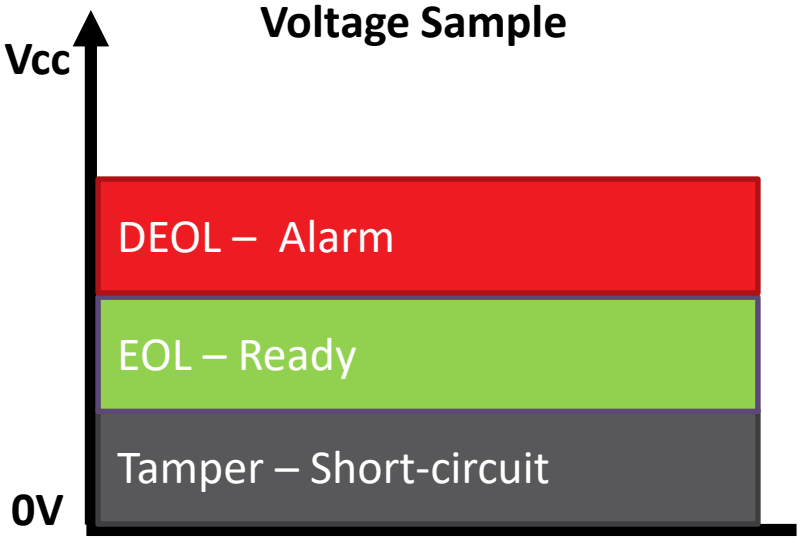
DEOL – Voltage Sampling in LightSYS



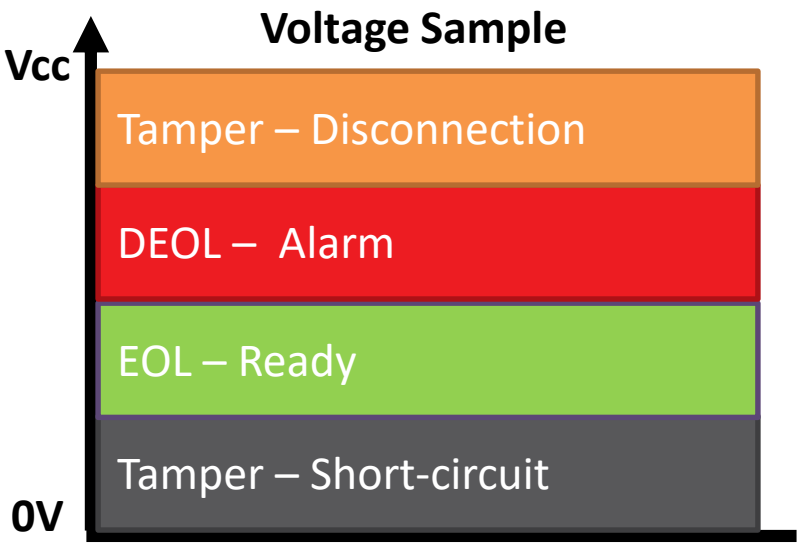


DEOL – Voltage Sampling in LightSYS

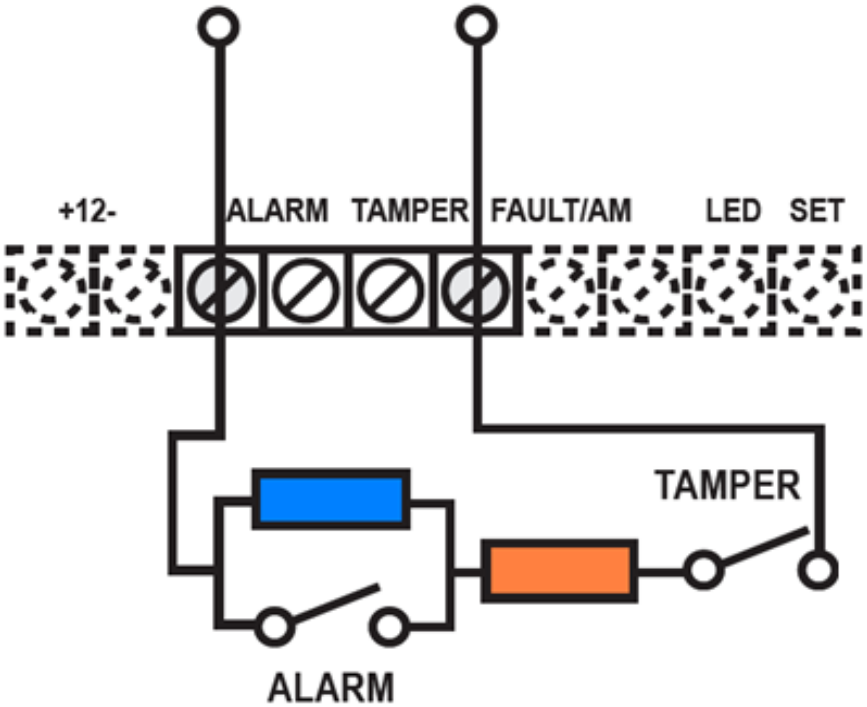


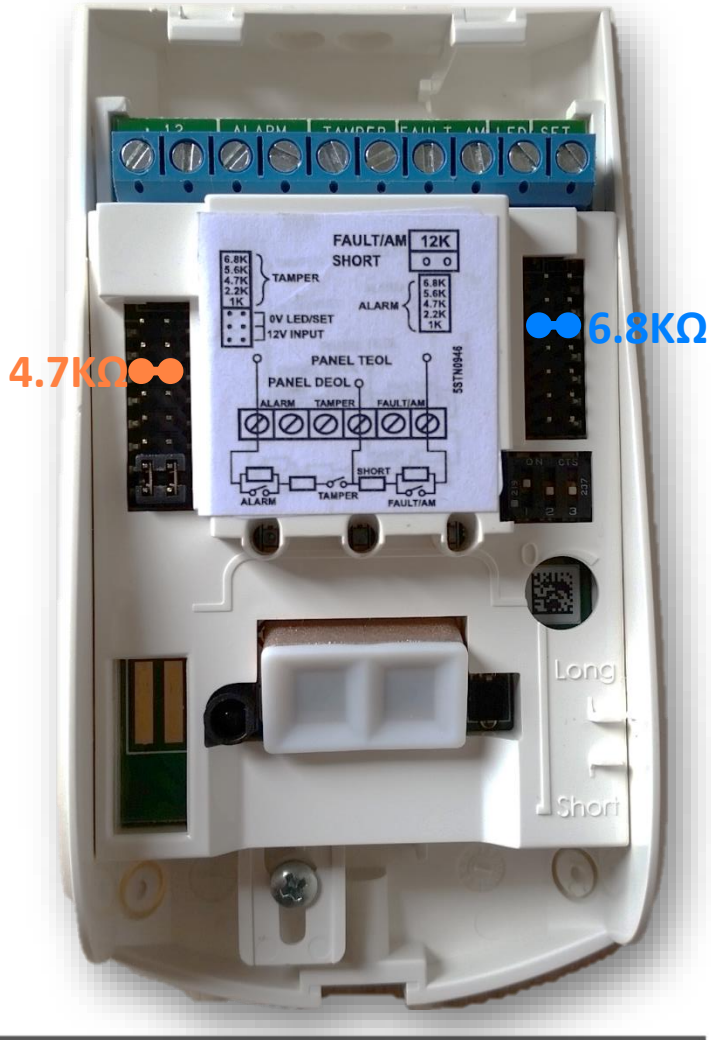


DEOL – Voltage Sampling in LightSYS

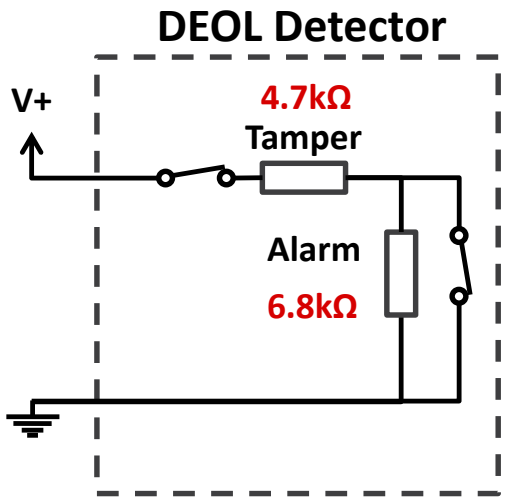


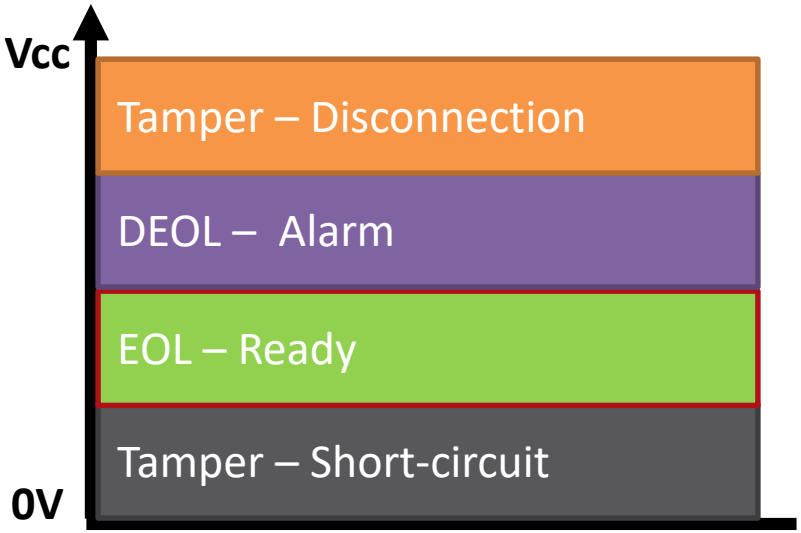
Double End of Line (DEOL) – Detector Side

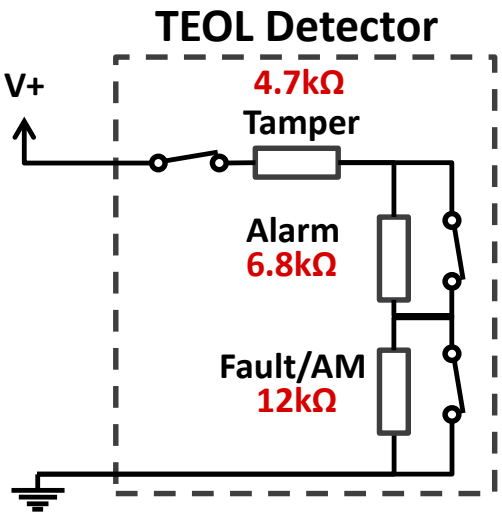


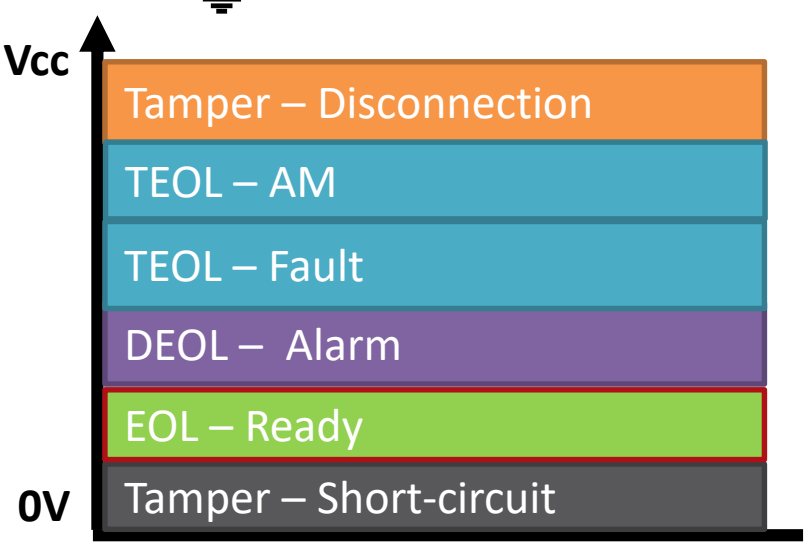


TEOL – Voltage Sampling in LightSYS









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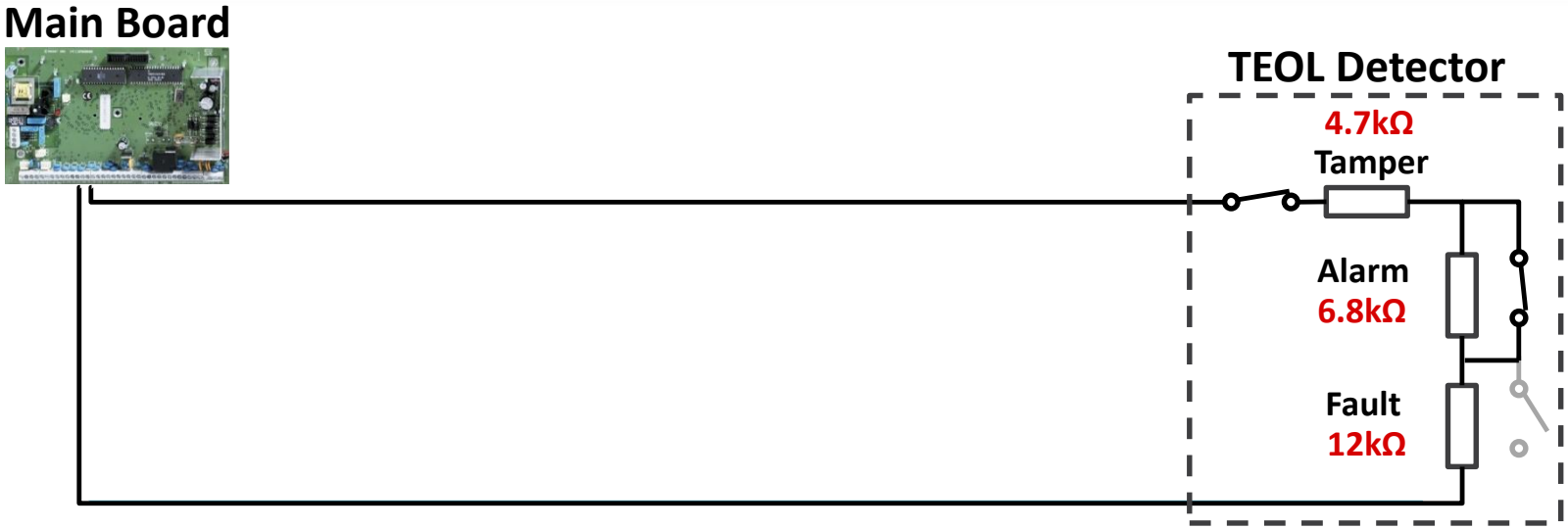

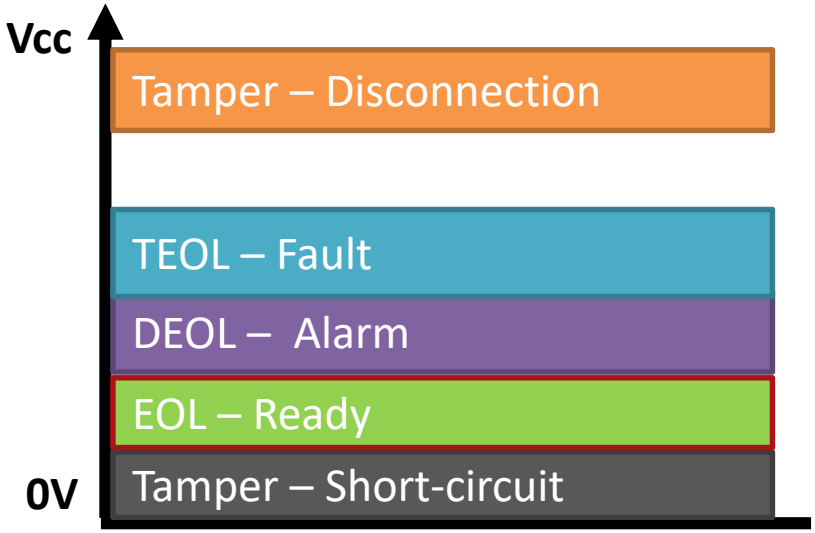

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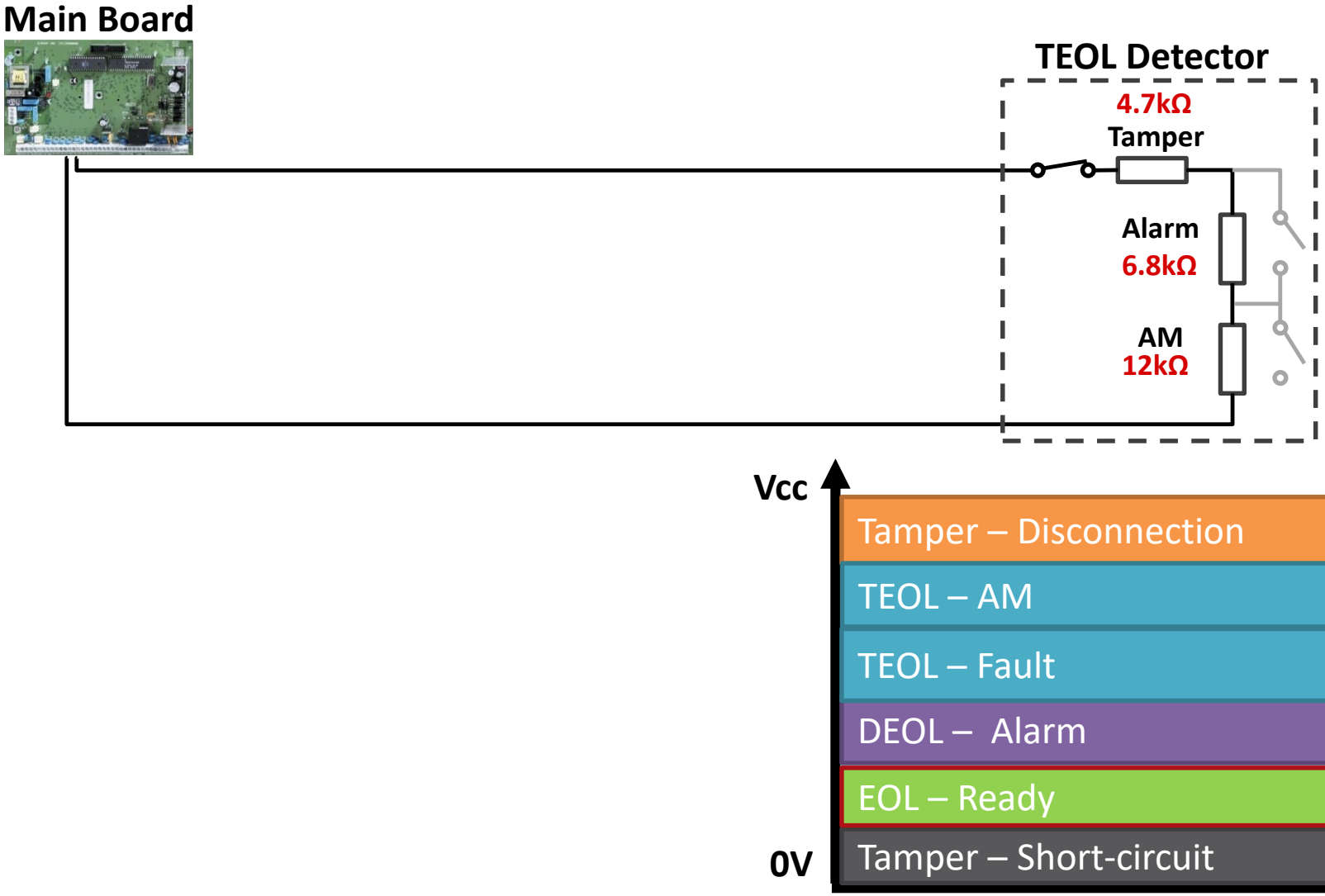
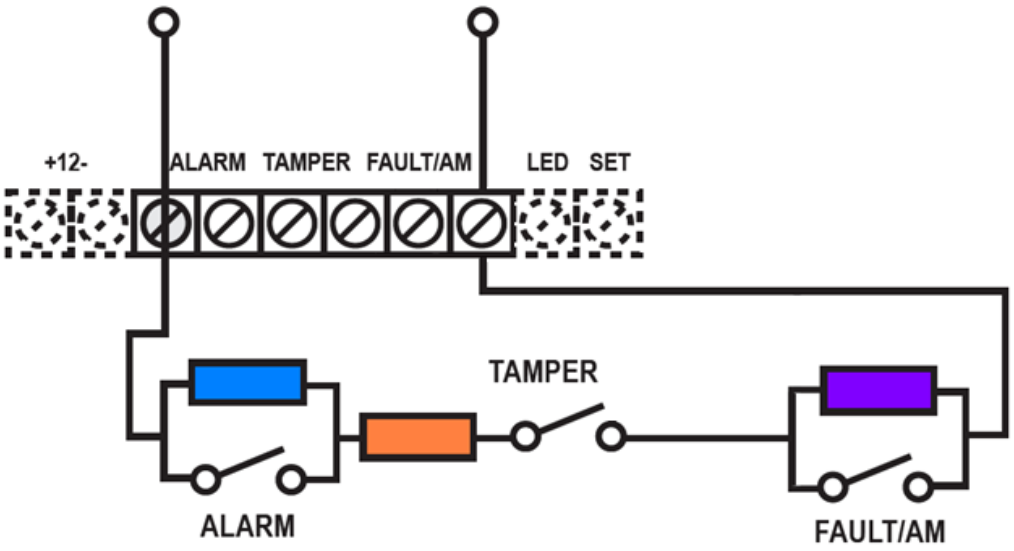
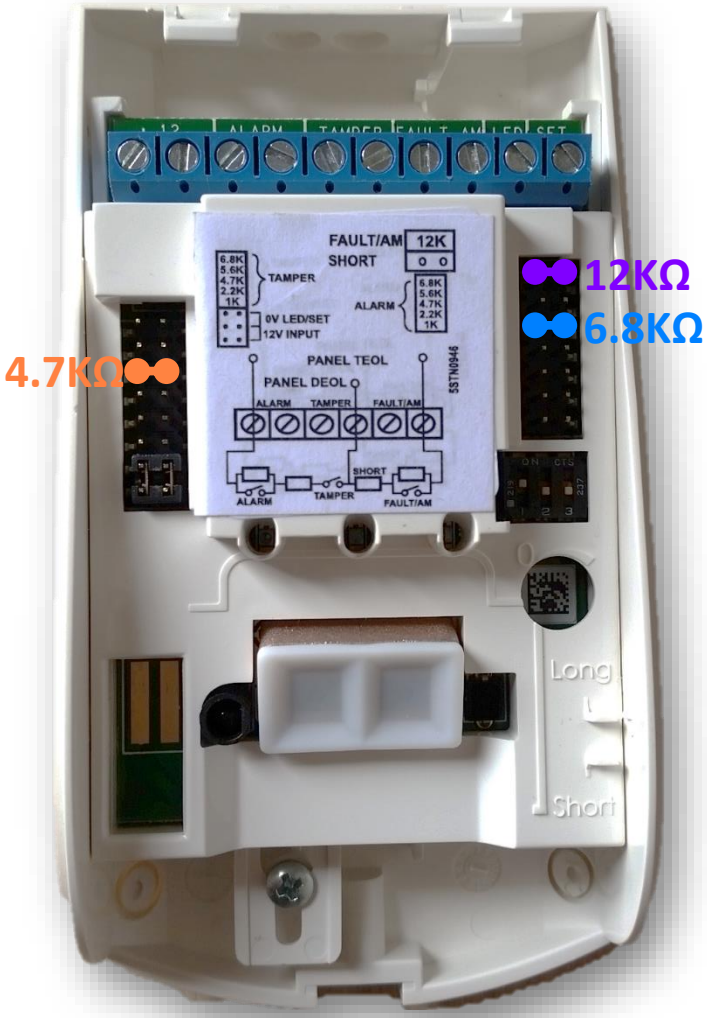


Triple End of Line (TEOL) – Detector Side





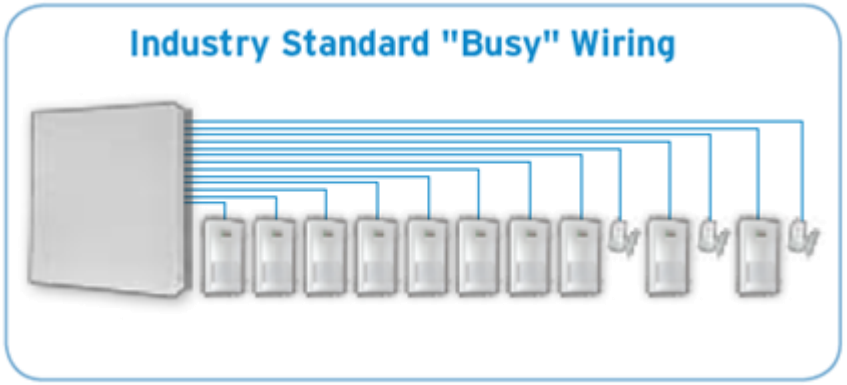
Configurable EOL & DEOL Resistance

ID	EOL	DEOL
0	Customized	
1	2.2K	2.2K (Default)
2	4.7K	6.8K
3	6.8K	2.2K
4	10K	10K
5	3.74K	6.98K
6	2.7K	2.7K
7	4.7K	4.7K
8	3.3K	4.7K
9	1K	1K
10	3.3K	3.3K
11	5.6K	5.6K
12	2.2K	1.1K
13	2.2K	4.7K

Agenda

- LightSYS 2 - Wired Connections
- RISCO BUS
- Smartphone Application

RISCO BUS



Most detectors can be installed in series on a 4-core alarm cable

Drastically reduces installation time, shortens wiring lengths and on-site maintenance

Includes BUS Test feature

RISCO BUS - Peripherals

Industrial LuNAR

Iwise

WatchOUT

expanders

IP Module

WatchIN

LightSYS™

GSM\GPRS Module

Lumin8

Keypads

Lumin8 Delta

Wireless Receiver

Power Supply

BUS Specifications

300m maximum length for main panel Bus line and for Detector Bus lines with 20 AWG (0.8mm)

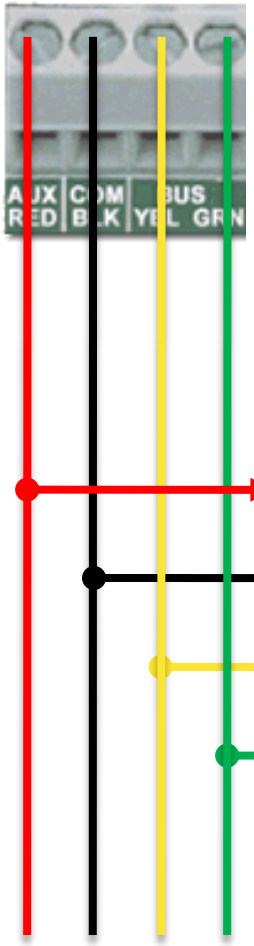
1000m maximum length per bus line with shielded twisted pair Cat 5 cable, and on condition Bus test result is 100%

BUS Zone Expander allows extension of additional 300m for BUS detectors

The BUS supports up to 32 BUS Devices

RISCO BUS – Wires

BUS Terminals



RISCOBUS
Save ● Control ● Win

+12V DC Power for modules on the BUS (AUX)

0V common for modules on the BUS (COM)

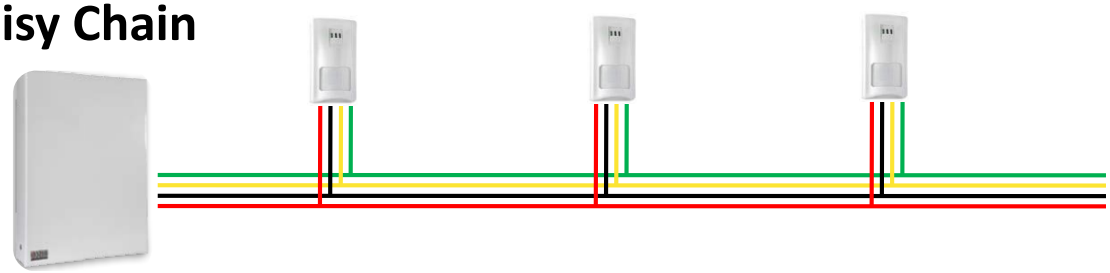
RS 485 DATA

RS 485 DATA

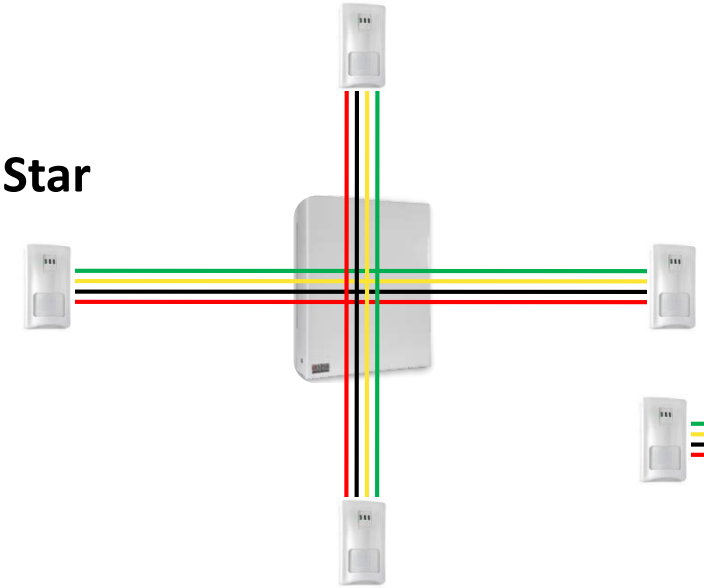
Send Settings, Receive Events, and Read Diagnostics

BUS Wiring Options

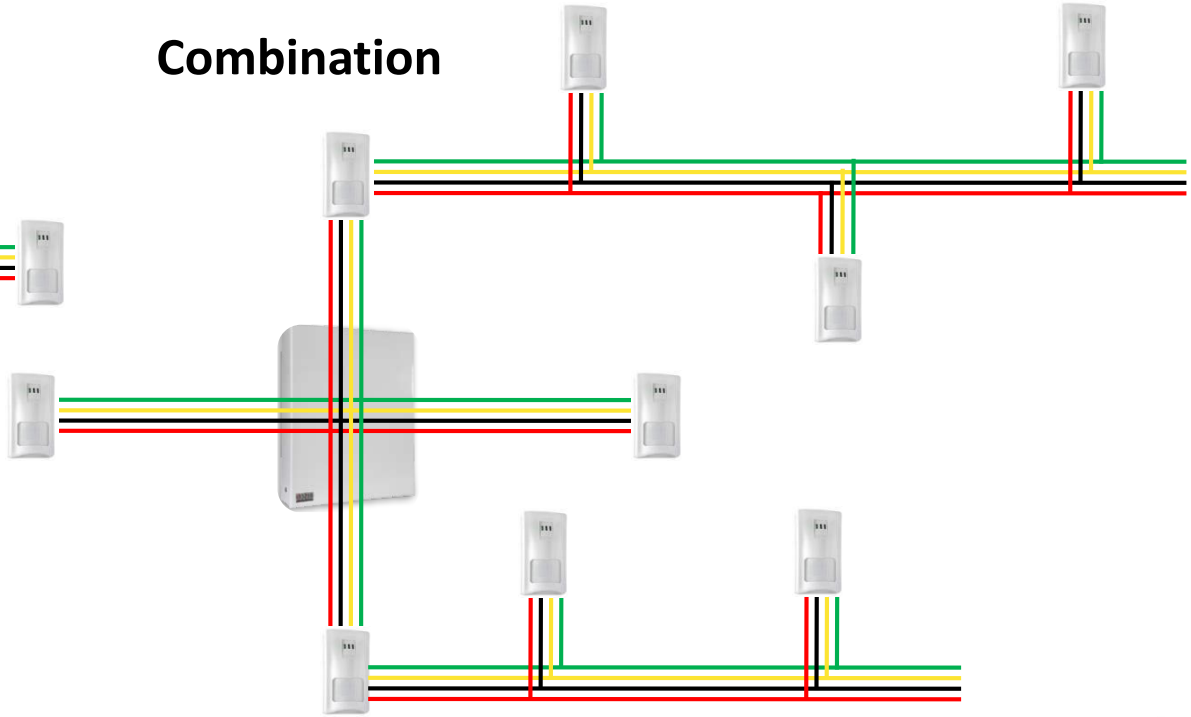
Daisy Chain



Star



Combination



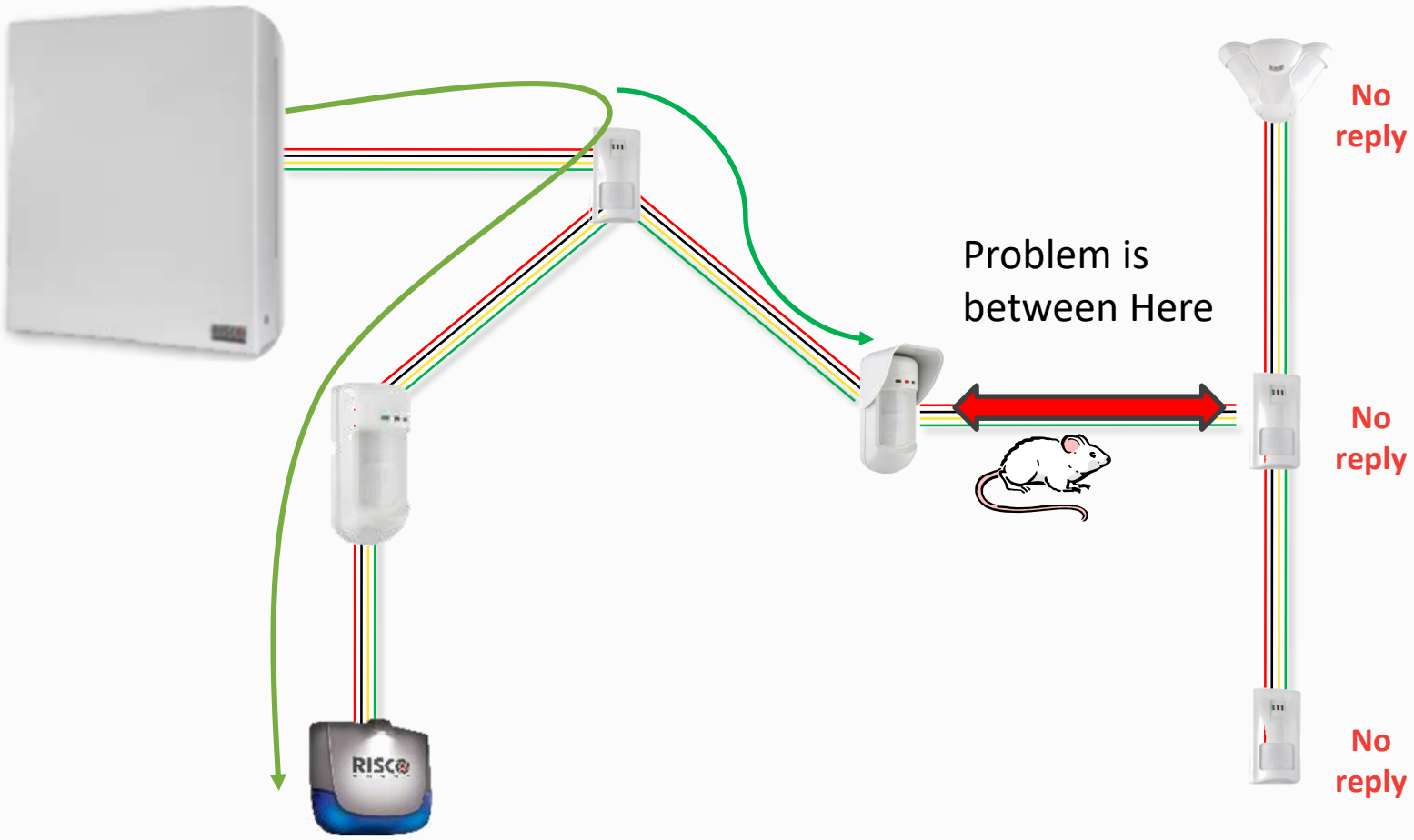
BUS Test

Checks every BUS device and helps locate fault

Allows extension of the BUS

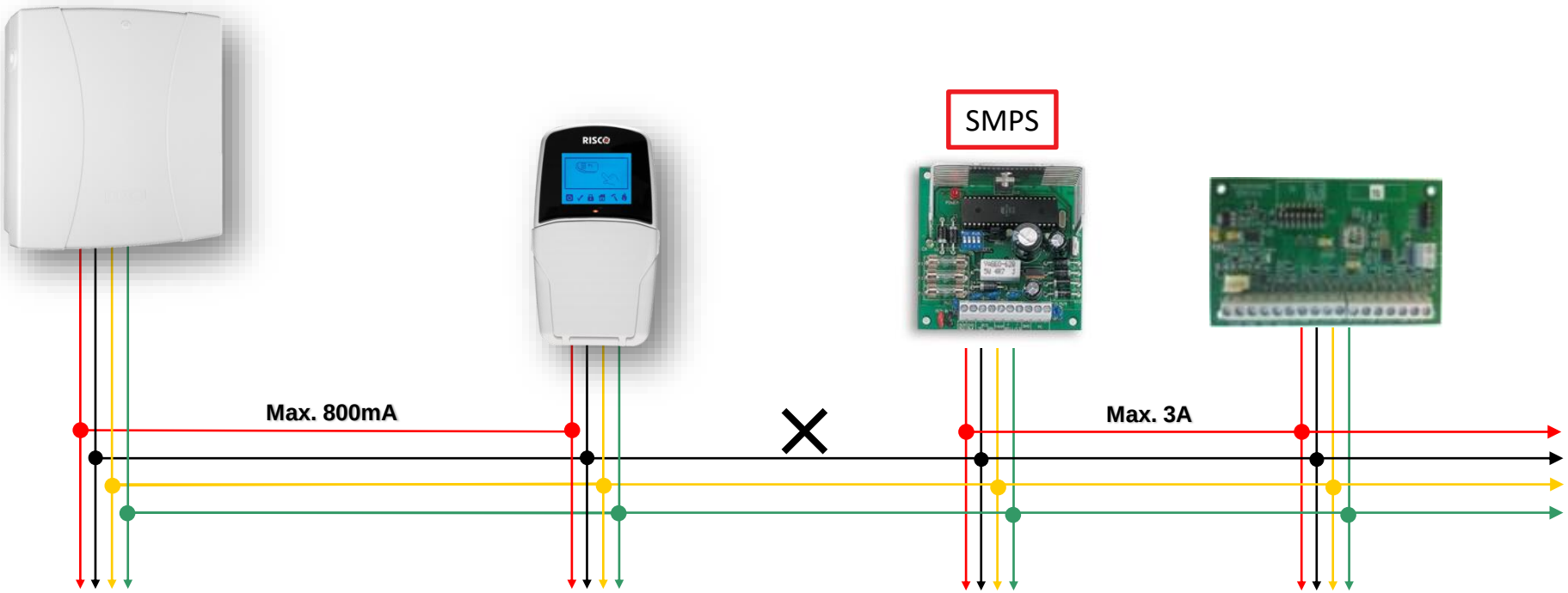
Tests the wiring prior to programming

Bus Test



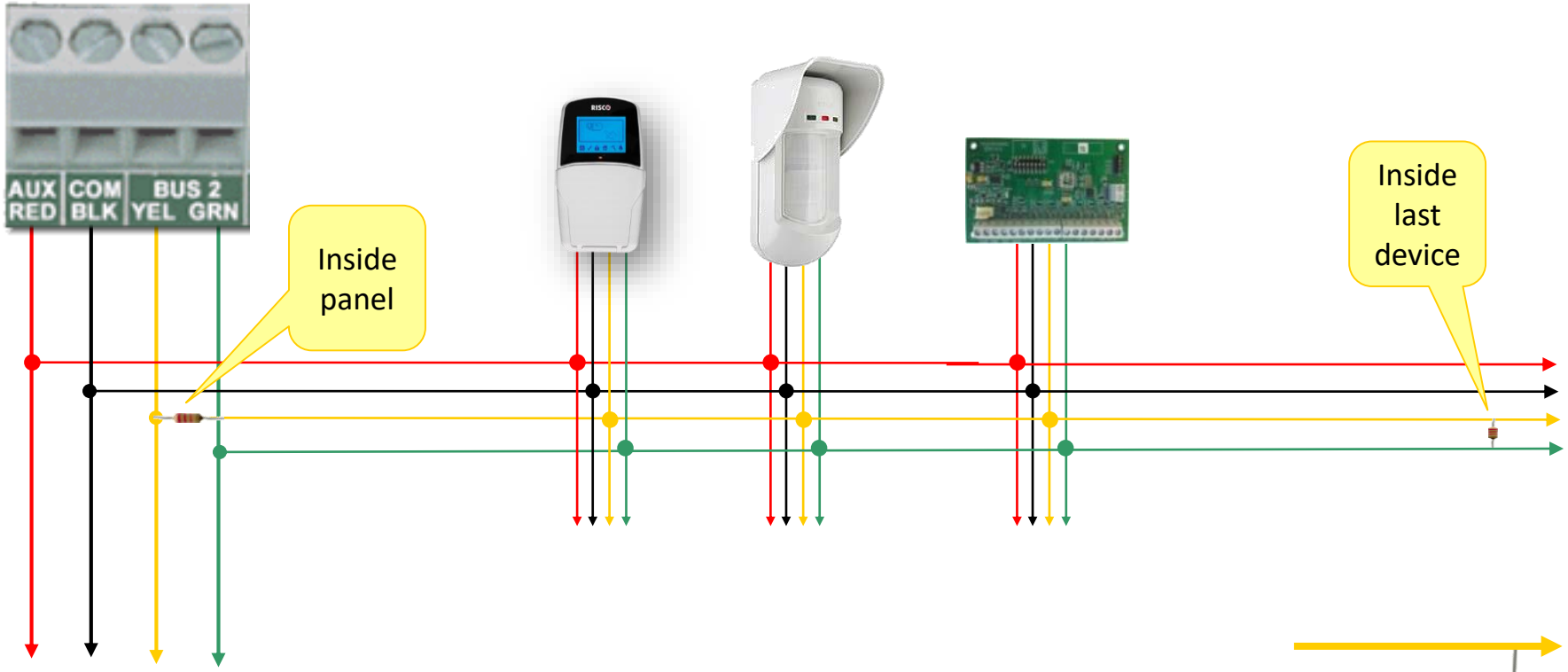
RISCO BUS – Tips (1)

When wiring BUS devices that have their own power supply,
DO NOT connect the red (AUX) cable

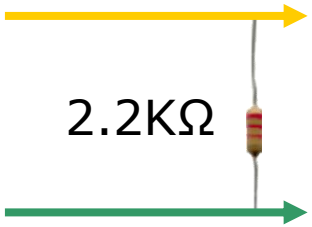


RISCO BUS – Tips (2)

BUS Terminals



Connect two 2.2KΩ resistors, one at each end of the BUS, between the green and yellow wires



Setting BUS Accessory ID Numbers

Devices are split into ‘Families’

Each ‘Family’ of devices has Sequential Identification Numbers

A device ID number is set by using DIP switches

First module in each category is defined as ID = 1

Sequential ID Numbers Families

Sequential ID Numbers Families	
Keypads	
Single Zone Expander	
Outputs	
Power Supplies	
BUS Zones	
Wireless Zone Expanders	

Devices ID Numbers – Example

Zone Family

8 Zone Expander — ID 1

BUS Zone Expander — ID 2

Wireless Expander — ID 3

Keypad Family

ID 1

ID 2

ID 3

ID 4

BUS Detector Family

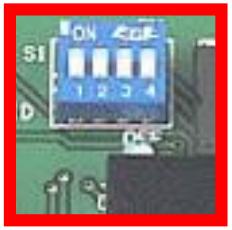
ID 1

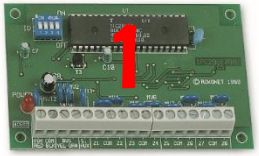
ID 2

ID 3

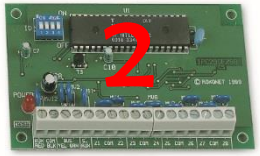
Devices ID Numbers Setting

Each Family has its addressed identified by the DIP switches.





On				
Off	■	■	■	■
	1	2	3	4



On	■			
Off		■	■	■
	1	2	3	4

On		■		
Off	■		■	■
	1	2	3	4

Devices ID Numbers Addresses

	DIP Switches				
ID	1	2	3	4	5
1	OFF	OFF	OFF	OFF	OFF
2	ON	OFF	OFF	OFF	OFF
3	OFF	ON	OFF	OFF	OFF
4	ON	ON	OFF	OFF	OFF
5	OFF	OFF	ON	OFF	OFF
6	ON	OFF	ON	OFF	OFF
7	OFF	ON	ON	OFF	OFF
8	ON	ON	ON	OFF	OFF
9	OFF	OFF	OFF	OFF	ON
10	ON	OFF	OFF	ON	OFF
11	OFF	ON	OFF	ON	OFF
12	ON	ON	OFF	ON	OFF
13	OFF	OFF	ON	ON	OFF
14	ON	OFF	ON	ON	OFF
15	OFF	ON	ON	ON	OFF
16	ON	ON	ON	ON	ON

BUS DETECTORS ONLY

	DIP Switches				
ID	1	2	3	4	5
17	OFF	OFF	OFF	OFF	ON
18	ON	OFF	OFF	OFF	ON
19	OFF	ON	OFF	OFF	ON
20	ON	ON	OFF	OFF	ON
21	OFF	OFF	ON	OFF	ON
22	ON	OFF	ON	OFF	ON
23	OFF	ON	ON	OFF	ON
24	ON	ON	ON	OFF	ON
25	OFF	OFF	OFF	ON	ON
26	ON	OFF	OFF	ON	ON
27	OFF	ON	OFF	ON	ON
28	ON	ON	OFF	ON	ON
29	OFF	OFF	ON	ON	ON
30	ON	OFF	ON	ON	ON
31	OFF	ON	ON	ON	ON
32	ON	ON	ON	ON	ON

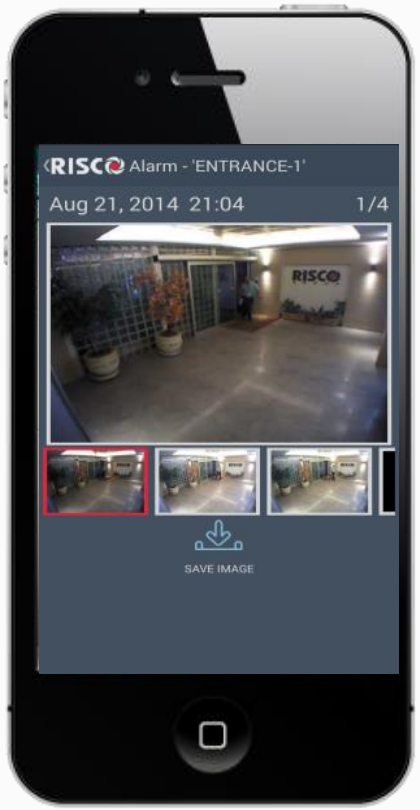
BUS DETECTORS ONLY

Agenda

- ✔ LightSYS 2 - Wired Connections
- ✔ RISCO BUS
- ✔ Smartphone Application

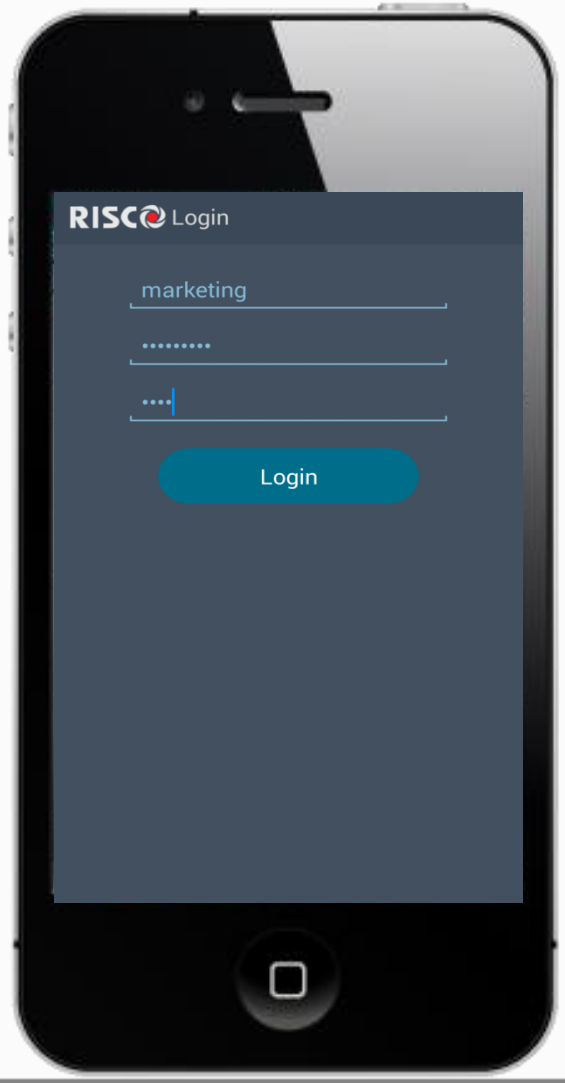
Smartphone Application

- Allows the end user to remotely control the system
- Easy to install and control on the Smartphone
- Available to Android and IPhone Smartphones

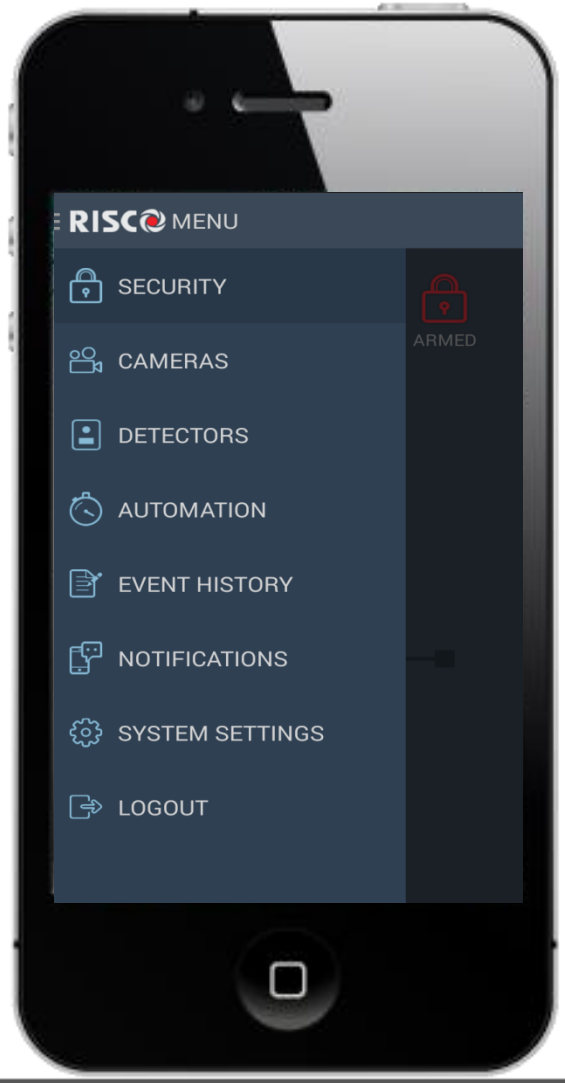


App Store Play Store iRISCO

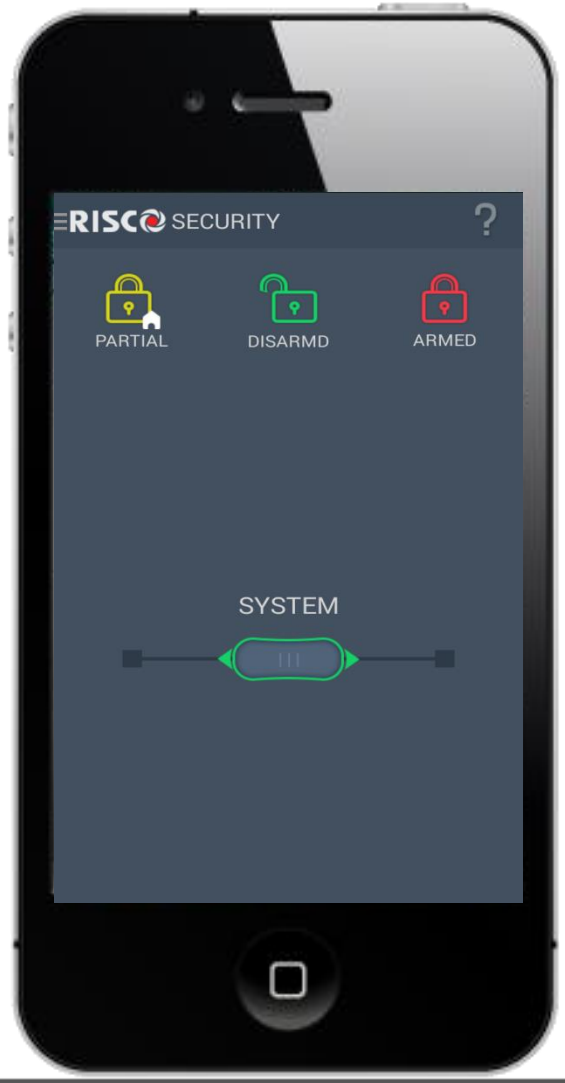
Login Screen



RISCO Menu

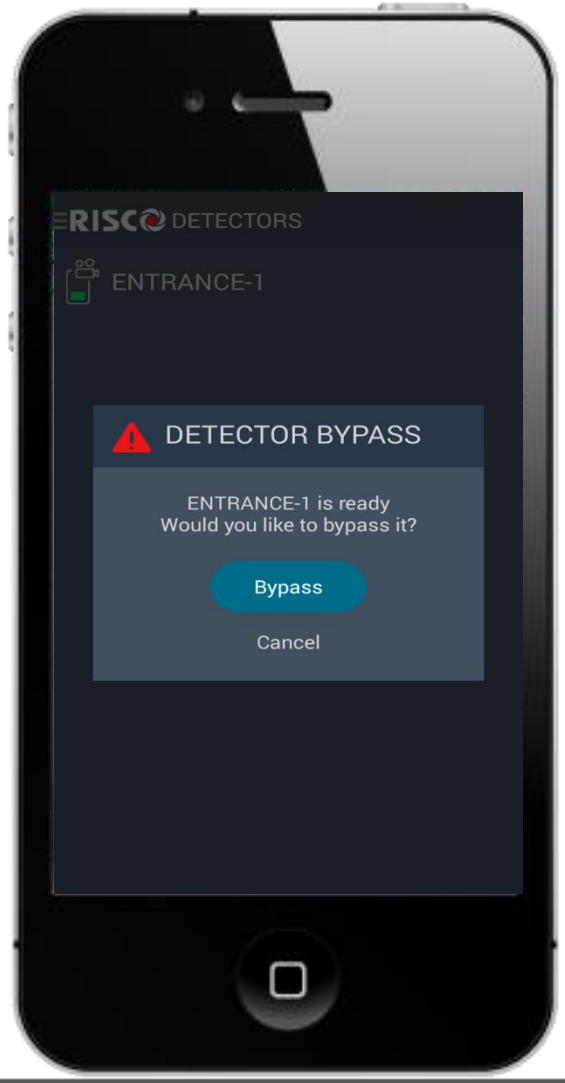

RISCO MENU
SECURITY
CAMERAS
DETECTORS
AUTOMATION
EVENT HISTORY
NOTIFICATIONS
SYSTEM SETTINGS
LOGOUT
ARMED

Security



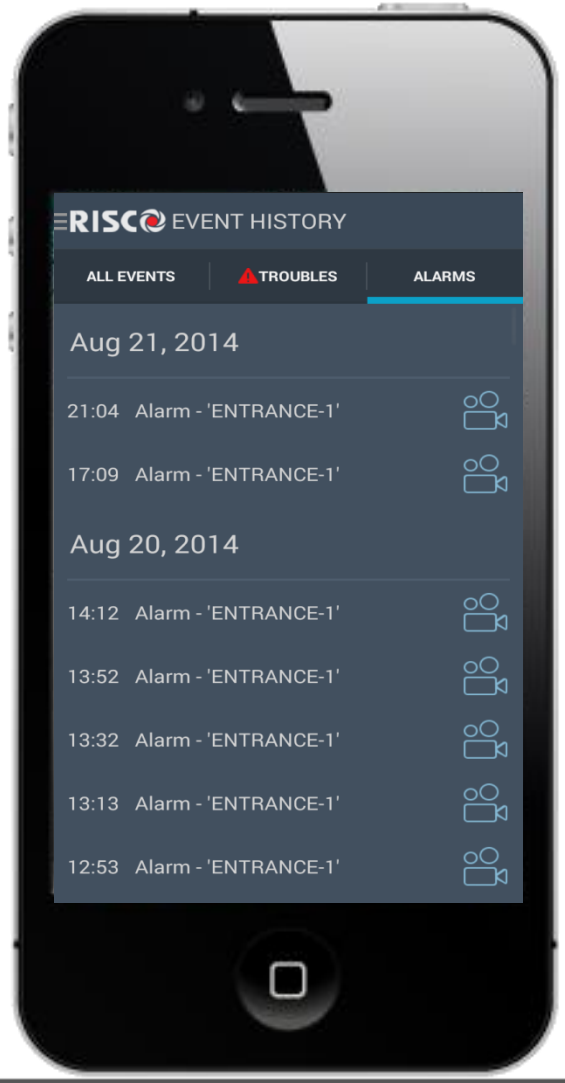
Cameras

Detectors

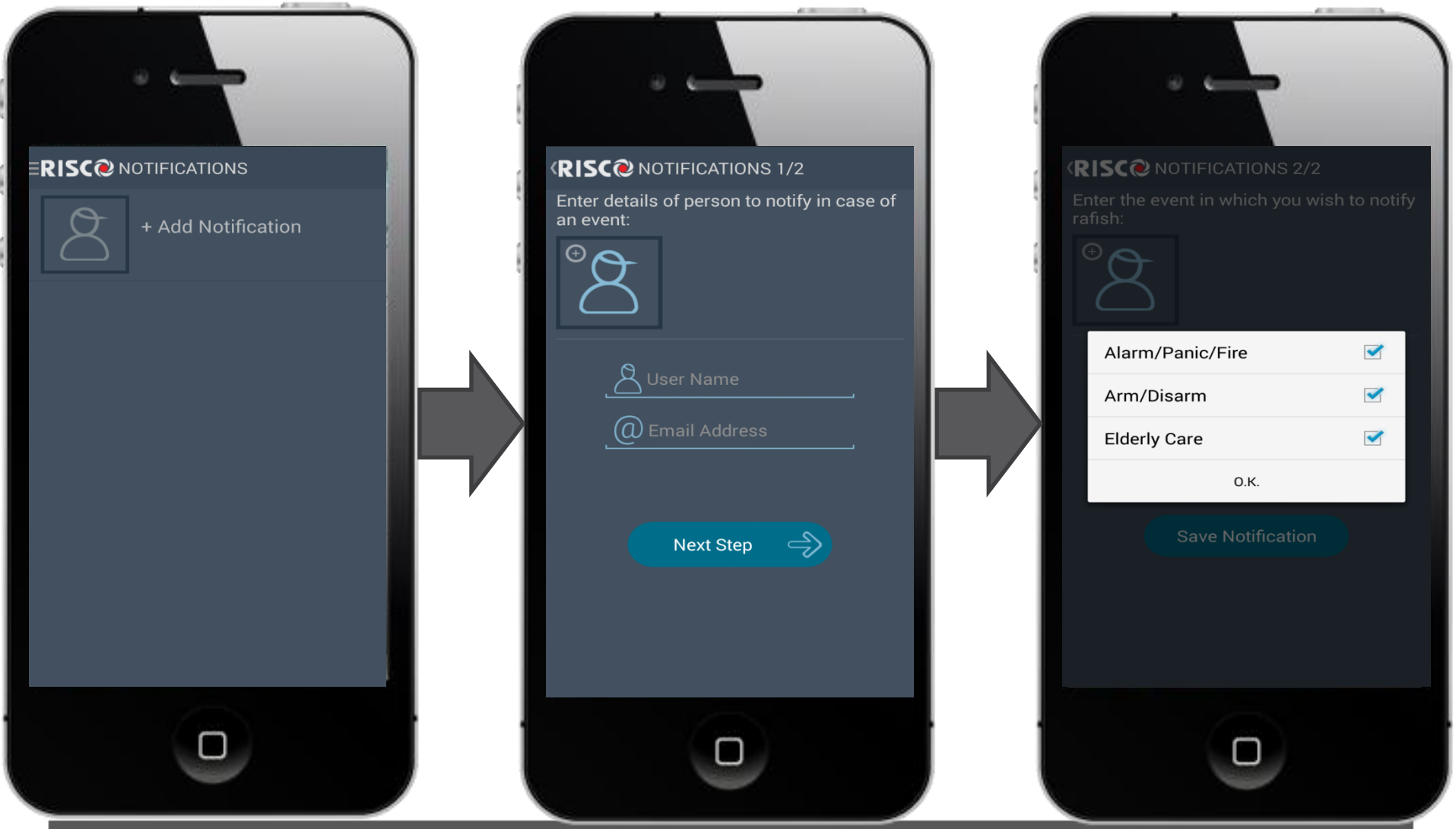

RISCO DETECTORS
ENTRANCE-1
DETECTOR BYPASS
ENTRANCE-1 is ready
Would you like to bypass it?
Bypass
Cancel

Automation

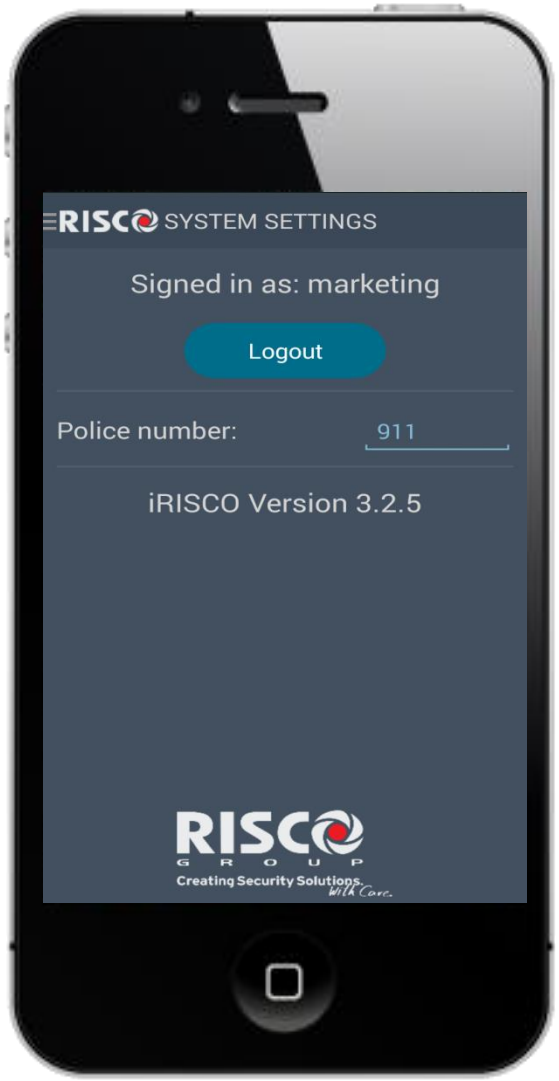
Event History



Notifications



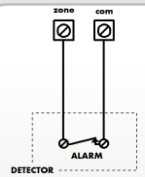
System Settings



Agenda

- LightSYS 2 - Wired Connections
- RISCO BUS
- Smartphone Application

Summary



Lightsys2 - Wired Connections

RISCOBUS
Save • Control • Win

Smartphone Application

Parallel Communication Capabilities

Any Questions?

Thank You

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