Advanced

AlarmCalm

Complete False Alarm Management for Hotels

Verification   Investigation   Reduction

Contents

AlarmCalm is the Unparalleled False Alarm Management Solution from Advanced.

AlarmCalm is powerful and flexible. It's easy to install and easy to configure, even with complicated cause-and-effect.

It's the best-in-class solution made up of three high performance components that make for perfect False Alarm Management, (FAM):

A Fast Fire System

Whilst core aspects of FAM are alarm verification, alarm acknowledgement and investigation delays to outputs, time is of the essence.

The fire system, be that single loop, single panel or a 200 node network, needs to react fast. There are issues having a 60 second acknowledgement time set if your network takes 15 seconds to process inputs - that's 25% of the time available.

Advanced is famous for the performance and speed of its networking and our MxPro 5 and Axis EN fire systems are the foundation for complete, high performance FAM.

The Complicated Made Easy

Complete FAM can involve complicated cause-and-effect. The AlarmCalm option in our DynamixTools Config software makes it very easy to set up FAM and to implement powerful configurations, often in one click. Our systems are famous for their ease-of-use and the AlarmCalm software is the perfect example of our approach.

For customers the software update is free and so is the training - not that we think you'll need it as it's just easy to use.

Intelligent Alarm Acknowledgement Devices

Our AlarmCalm Button allows the residents of a building to acknowledge and verify false alarms, one of the most potent methods of false alarm reduction.

The AlarmCalm Button is a fully intelligent loop device. It's compatible with a standard, UK single-gang backbox and installation is quick, inexpensive and looks good.

As it's intelligent the AlarmCalm Button offers multiple configuration options.

System Overview

AlarmCalm delivers results on the back of Advanced's high performance, rock solid panels and networks.

As such it's fast, easy to use and can scale from simple, small installations to large and high-rise sites with complicated cause and effect.

This example is based around a modern hotel. Driven by a network of MxPro 5 or Axis EN panels, the network includes our Lifeline radio paging solution, repeaters and a range of loop devices including the AlarmCalm Button, which provides intelligent alarm acknowledgement.

No system is as flexible or as easy to configure as an Advanced network and the following examples demonstrate just a small percentage of what is possible.

Accommodation Levels

Conference Level

Reception / Lobby / Bar

Kitchen and Dining
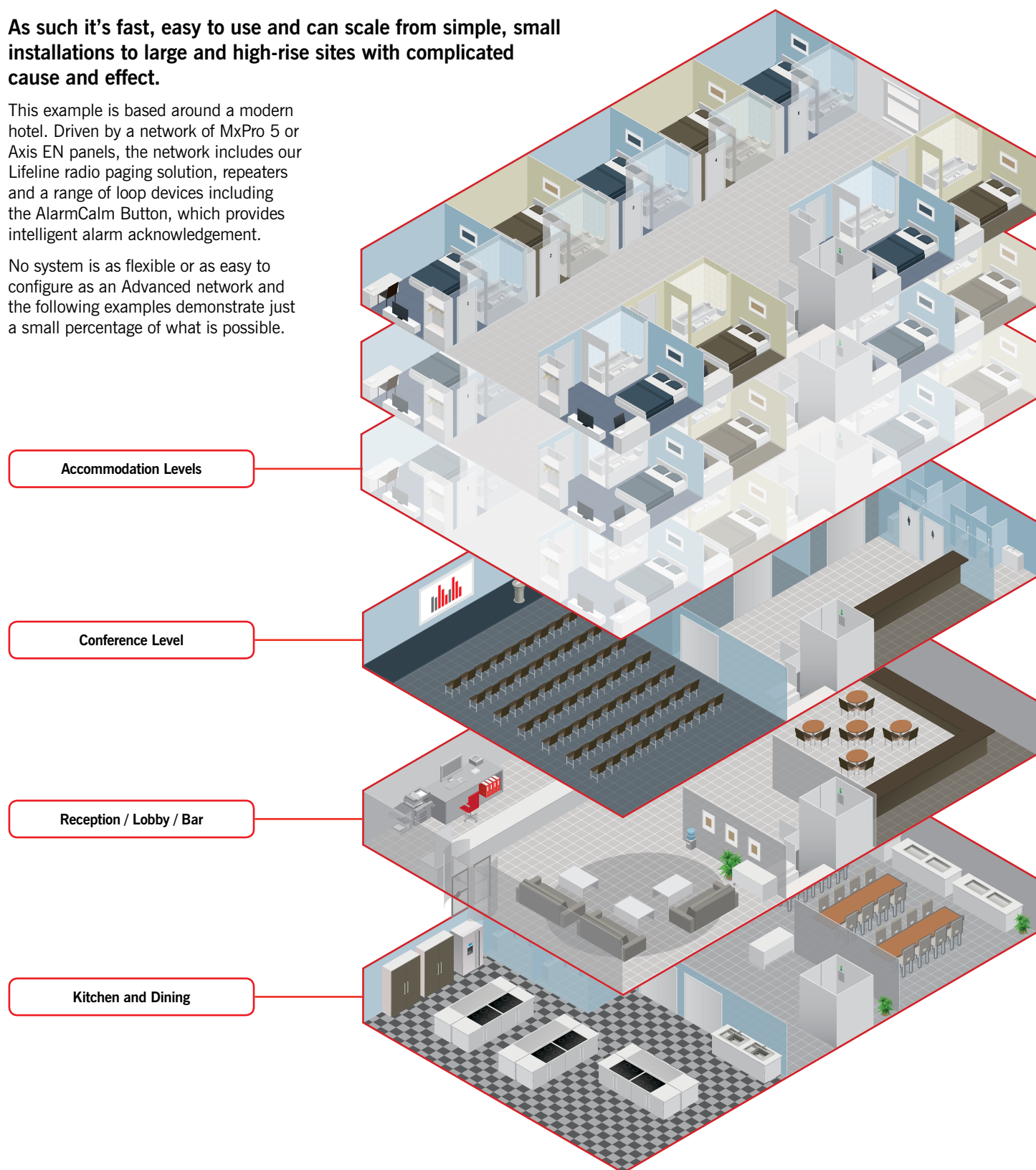
AlarmCalm System Components

AlarmCalm is currently available on our MxPro 5 multi protocol panel and Axis EN complete fire system that includes our Axis field devices.

Both MxPro 5 and Axis EN come in 1-8 loop panels (specials available) with a full range of repeaters available.

Panels can be used stand alone or easily networked into 200 node networks covering huge areas and complicated sites. Advanced's networking is high speed and high performance and acknowledged as one of the best solutions available.

AlarmCalm Button

The AlarmCalm Button is an option in our AlarmCalm system. It allows the residents or trained staff in a building to acknowledge an alarm and initiate a programmable time delay or verification time that gives any obviously false alarm signal time to clear.

LifeLine Panel

LifeLine is three systems in one. It offers detailed fire system status to be sent to nominated users via pager.

It can be used as an out of the box staff notification tool; and is an easily installed Equality Act compliant system that can be used to alert the hard of hearing to fire alarms.

Call Point

Optical / Multi-sensor / Heat Detector

Sounder Beacon Base

False Alarm Settings and Config

False Alarm Management:
The Hotel

A busy hotel with 100 bedrooms and conferencing/events and kitchens/dining.

Accommodation

Corridor
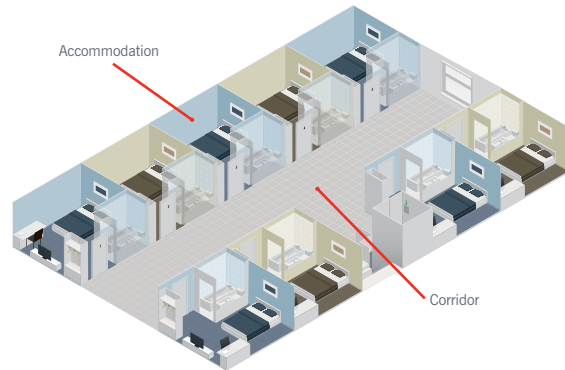
Accommodation

Bedrooms:

Building Areas 1-100
Devices in bedrooms assigned to a unique Building Area number.
For example the room number.

Detection & Devices:

Optical Smoke

Verification Allowed by:

1. Persistent Signal
2. Max number of Areas in Alarm (set to 5).
   This means if more than five bedrooms show an alarm, a full evacuation will be sounded, regardless of any other settings. Equally, if three bedrooms and three other Building Areas are in alarm, equally a full evacuation will be sounded. If any common area goes into alarm a full evacuation is sounded.
3. Call Point activation in corridor

Verification Settings:

1. Stage 1 Time (on initial smoke signal) 60s
2. Stage 2 Time 0s (No Acknowledgment allowed).

Verification Outputs:

Local Sounders/Beacons

Other Outputs:

Message at Fire Manager's Pager

Communal Areas

Communal Areas:

All communal areas set as Building Area 200.
No Verification allowed.

False Alarm Management by Building Area

Building Areas are virtual areas that by default match fire zones but that can be specified independently, to cover multiple zones and points or individual points.

Each Advanced MxPro 5 or Axis EN panel supports 200 Building Areas, (so up to 40,000 over a large network). Each Building Area can have entirely independent FAM strategies, or they can be grouped and share common settings.

For example all common areas in a building, that must share the same settings to comply with standards, can be set to a single building area, quickly and easily.
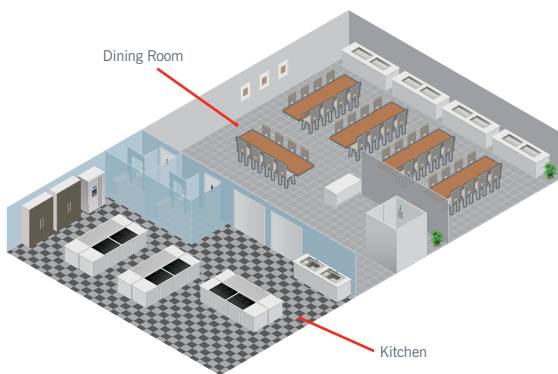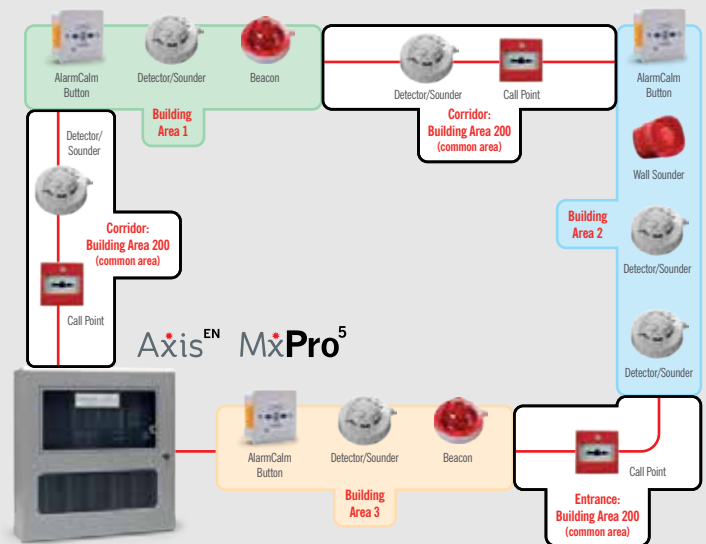
Kitchen and Dining

Kitchen and Dining Room:

All devices in kitchen assigned to Building Area 101.
All devices in Dining Room assigned to Building Area 102.

Detection and Devices:

4 x Heat Detectors (Kitchen)
2 x AlarmCalm Buttons (Kitchen)
4 x Multisensors (Dining Area)
2 x Optical Smoke (Toilets)

Verification allowed by:

1. Second Heat Detector above threshold
2. Call Point
3. Max number of Areas in Alarm (set to 5)

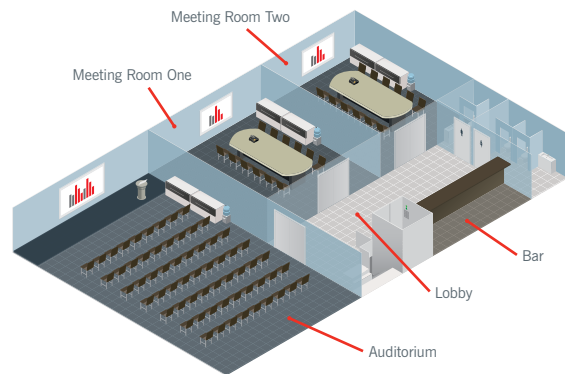**Verification Settings:**

1. Stage 1 Time (on initial heat signal) 60s
2. Stage 2 Time 90s

Verification Outputs:

Local Sounders/Beacons
AlarmCalm Button LED & Buzzer
Local fire doors closed
Beacon in Reception

Other Outputs:

Message at Fire Manager's Pager

Conferences and Meetings

Convention Centre:

Theatre - Building Area 103
Meeting Rooms 1 & 2 - Building Area 104-105
Common Area - Building Area 200

Detection and Devices:

10 x Multisensors
6 x Sounders and Beacons
3 x Wall Beacon
1 x Panel Repeater

Verification allowed by:

1. Mode Change
2. Call Point
3. Max number of Areas in Alarm (set to 5)

Verification Settings:

1. Stage 1 Time (on initial heat / smoke signal) 60s
2. Stage 2 Time 90s

Verification Outputs:
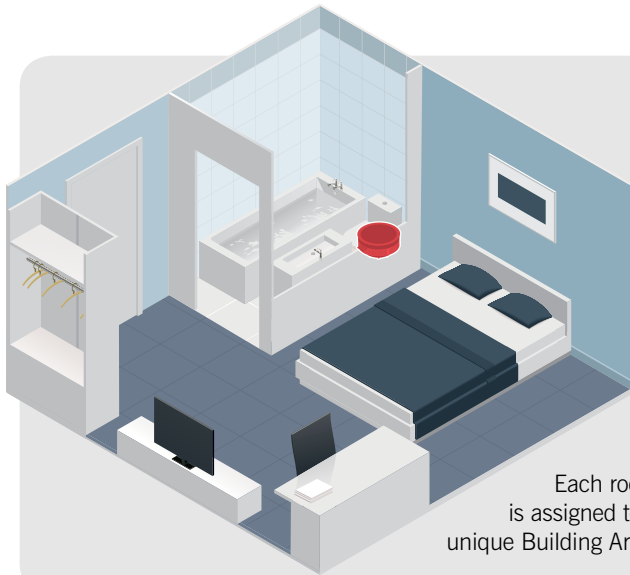
Local fire doors closed
Beacon in Reception

Other Outputs:

Message at Fire Manager's Pager

AlarmCalm Cause and Effect
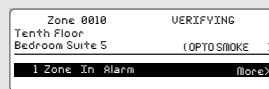
Example of Use in Hotel Bedrooms

AlarmCalm works alongside the in-built signal verification technology in modern smoke detectors to offer an unbeatable solution that is built around the real world needs of guests and management.

❶ Smoke Detected

If a bedroom smoke detector operates, a 60s Verification Time (Stage 1) is activated. The time is fully programmable. The sounder/beacons in the bedroom will activate to notify the occupant.
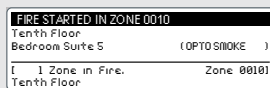
No other sounder/beacons in the building operate during this initial period. The panel will buzz and display 'Bedroom X Verifying' for the programmable Hold Time.

Each room is assigned to a unique Building Area.

```
    Zone 0010        VERIFYING
Tenth Floor
Bedroom Suite 5        (OPTO SMOKE   )

  1 Zone In Alarm           More>
```

Stage 1

After the Stage 1 Verification Time is Over:

❷a Full Alarm

If the bedroom smoke detector is still in alarm condition at the end of Stage 1 Verification Time, a full Alarm/Evacuation will be sounded. All sounders and beacons in the hotel will activate to notify all occupants of the fire alarm condition and to respond accordingly. The panel buzzer will continue to sound (or re-sound if it was previously muted) and the panel will display a fire alarm. This condition is now latched until reset by a responsible person.

FIRE

```
FIRE STARTED IN ZONE 0010
Tenth Floor
Bedroom Suite 5        (OPTO SMOKE   )

[   1 Zone in Fire.        Zone 0010]
Tenth Floor
```

OR ❷b System Reset

If the bedroom detector is no longer in alarm condition, the local bedroom sounder/beacon silences and the fire panel returns to its normal condition. No evacuation is sounded and a major false alarm averted.
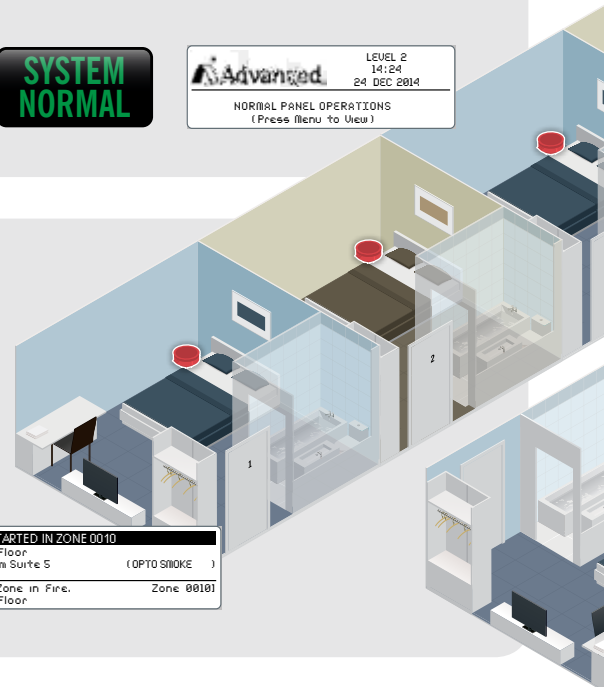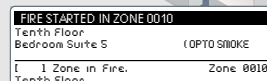
SYSTEM NORMAL

```
Advanced              LEVEL 2
                      14:24
                   24 DEC 2014

      NORMAL PANEL OPERATIONS
        (Press Menu to View)
```

More Verification Options:

❸ Coincidence Detection

If a 2nd smoke detector in another bedroom also operates, the sounder / beacon in that bedroom will also activate and the panel will display 'Bedroom X Verifying, Bedroom Y Verifying'.

The Max Building Areas in Verification (e.g. 5): can be set and if a sixth anywhere on the site goes into Verification a full Alarm condition will be immediately sounded.

FIRE

```
FIRE STARTED IN ZONE 0010
Tenth Floor
Bedroom Suite 5        (OPTO SMOKE   )

[   1 Zone in Fire.        Zone 0010]
Tenth Floor
```

MxPro Repeater

Call Point

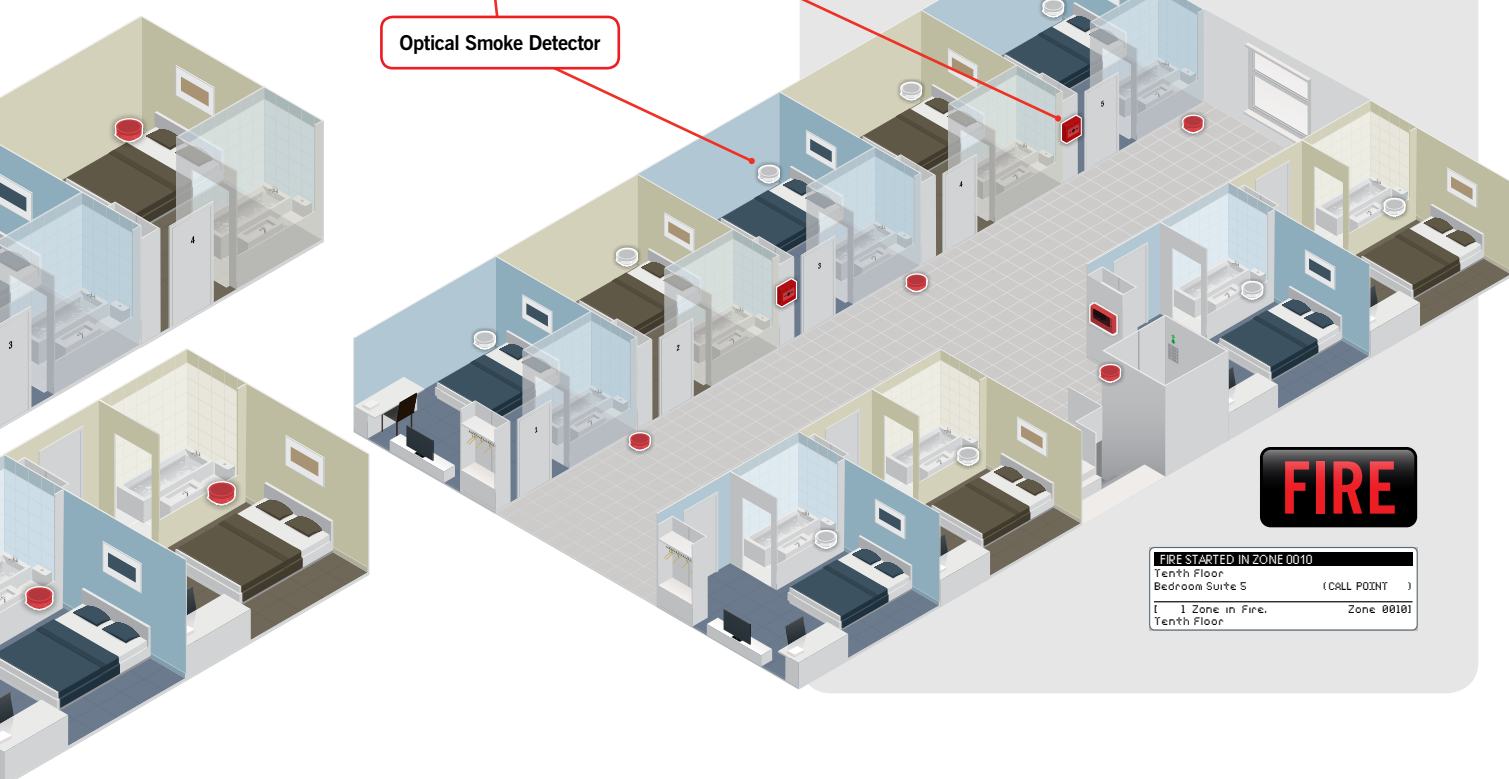**Optical Smoke Detector**
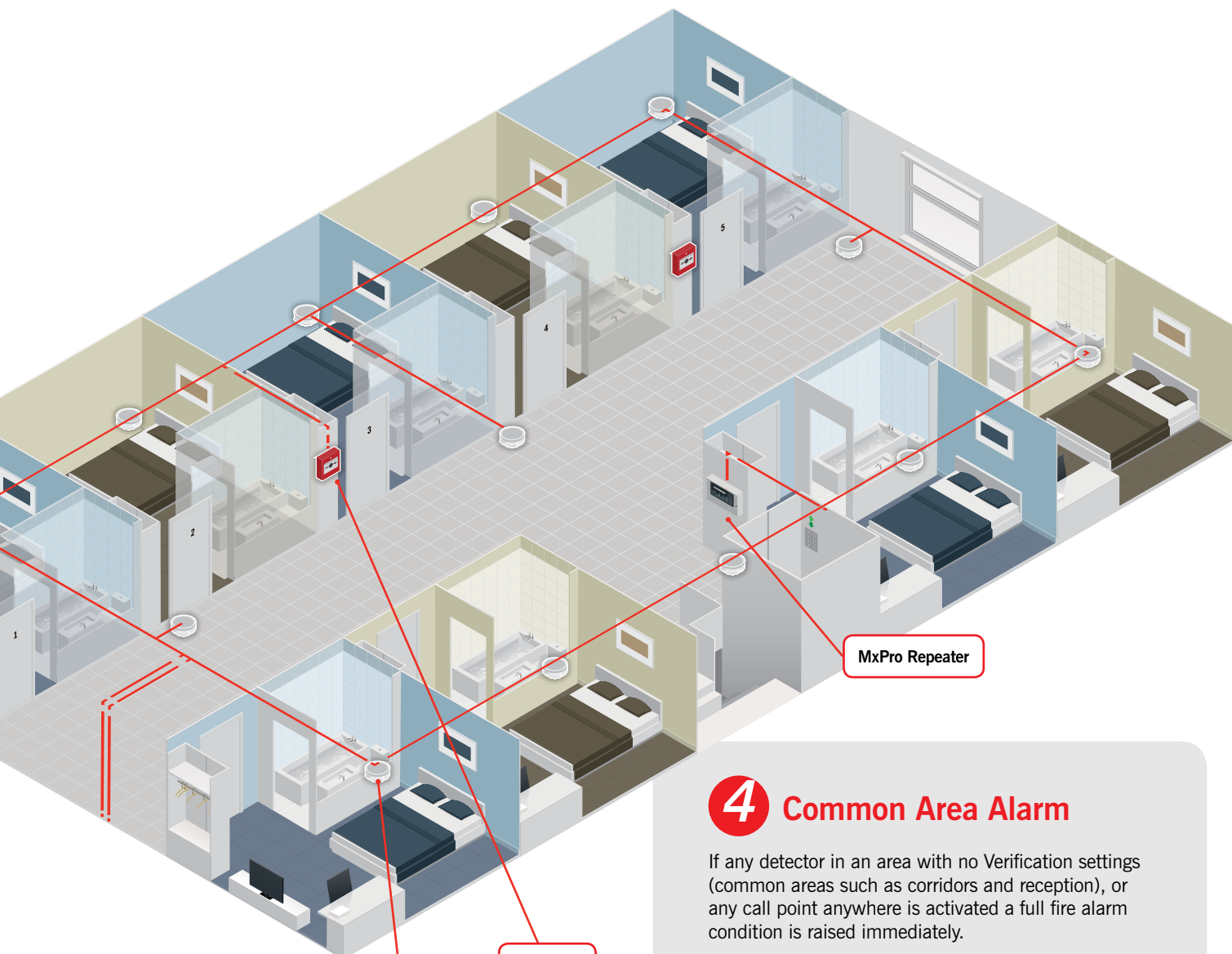
4 Common Area Alarm

If any detector in an area with no Verification settings (common areas such as corridors and reception), or any call point anywhere is activated a full fire alarm condition is raised immediately.
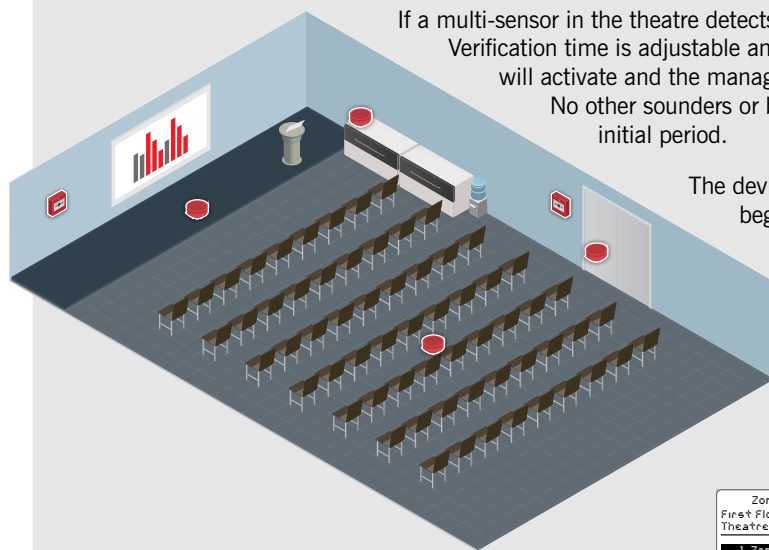
FIRE

FIRE STARTED IN ZONE 0010
Tenth Floor
Bedroom Suite 5   (CALL POINT   )

[1 Zone in Fire.   Zone 0010]
Tenth Floor

AlarmCalm Cause and Effect

Example of Use in Conferencing Facilities

AlarmCalm software can be used to radically reduce false alarms and improve safety in hotel conferencing facilities.

❶ Smoke detected in Theatre

If a multi-sensor in the theatre detects smoke, a 60s Verification time begins. The Verification time is adjustable and fully programmable. A beacon in the hotel reception will activate and the manager will be sent a page warning him of the issue. No other sounders or beacons in the hotel will operate during this initial period.

The device detecting smoke will change its mode and begin to monitor for heat only.

The local repeater will indicate the activated device and its buzzer will sound to alert local staff. The buzzer on the main panel in reception will also sound and it will display 'Theatre – Verifying' for the duration of the Verification Hold time which is fully programmable.

```
     Zone 0003        VERIFYING
First Floor
Theatre                (OPTO SMOKE   )

 1 Zone In Alarm              More>
```

Stage 1

During/After the Stage 1 Verification Time is Over:

❷a Heat Detected

If heat is detected by the first detector during the verification period a full alarm condition is raised, immediately overriding the Stage 1 verification period.

```
FIRE STARTED IN ZONE 0003
First Floor
Conference Room      (OPTO SMOKE   )

[    1 Zone in Fire.        Zone 0003]
First Floor
```

FIRE

❷b No Heat Detected or 2nd Detector Activated

If by the end of the verification period no heat is detected or 2nd detector activated the system will return to SYSTEM NORMAL and all sounders, beacons and buzzers will be cancelled.

```
                    LEVEL 3
 Advanced           14:24
                    24 DEC 2014

NORMAL PANEL OPERATIONS
(Press Menu to View)
```

SYSTEM NORMAL

❷c 2nd Detector Activated

If smoke is detected by a 2nd detector located in the conference area a full fire alarm condition is raised. If the Maximum number of building areas allowed in verification is exceeded at any time a full fire alarm condition is raised.

```
FIRE STARTED IN ZONE 0003
First Floor
Conference Room      (OPTO SMOKE   )

[    1 Zone in Fire.        Zone 0003]
First Floor
```
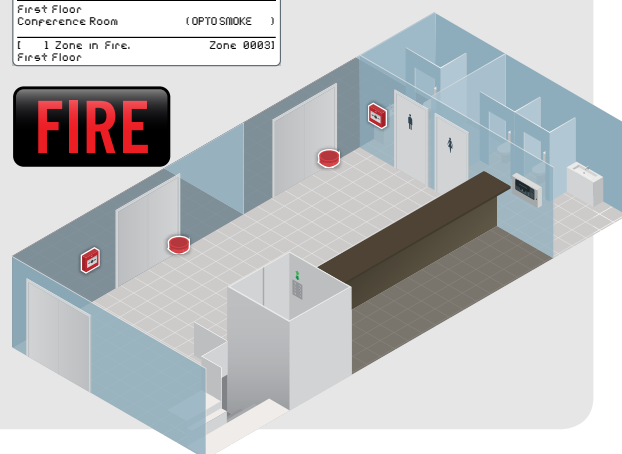
FIRE

④ No verification

If a signal is detected in any of the common areas, where no Verification is allowed a full Fire condition will be signalled.

```
FIRE STARTED IN ZONE 0003
First Floor
Conference Room        ( OPTO SMOKE   )

[    1 Zone in Fire.          Zone 0003]
First Floor
```

FIRE

③ Stage One only

If any of the detectors in the meeting rooms operate a stage 1 Verification time of 60s is initiated. The sounder/beacon in each meeting room will sound, the repeater will indicate the room in verification and buzz. A beacon above the door of each meeting room will indicate where the signal has occurred. At the end of this period the system will institute a full Fire alarm if the signal is still present or reset to Normal operation if it is clear.

```
FIRE STARTED IN ZONE 0003
First Floor
Conference Room        ( OPTO SMOKE   )

[    1 Zone in Fire.          Zone 0003]
First Floor
```

FIRE

If Signal Clears in Stage 1 Time:

```
                          LEVEL 3
  Advanced                14:24
                          24 DEC 2014

       NORMAL PANEL OPERATIONS
         (Press Menu to View)
```

SYSTEM NORMAL

60

Stage 1

⑤ Coincidence Detection

If a 2nd smoke detector in another bedroom or meeting room also operates, the sounder / beacon in that area will also activate and the panel will display 'Meeting Room X Verifying, Bedroom Y Verifying'.

The user can set the Max Building Areas in Verification (e.g. 5) and if a sixth anywhere on the site goes into Verification a full Alarm condition will be immediately sounded.

```
FIRE STARTED IN ZONE 0003
First Floor
Conference Room        ( OPTO SMOKE   )

[    1 Zone in Fire.          Zone 0003]
First Floor
```

FIRE

AlarmCalm Cause and Effect

Example of Use in Hotel Kitchens

Hotel kitchens are a challenging environment and one where quickly verified alarms are important.

1 Day/Night Settings

Verification can be set to on or off by Building Area and Day/Night Settings. During the day Verification is switched on, during the hours the kitchen is closed and unmanned, Verification is switched off and the system will go into full Fire condition if a detector receives a valid signal.

```
FIRE STARTED IN ZONE 0001
Basement
Kitchen                    (OPTO SMOKE   )

[    1 Zone in Fire.          Zone 0001]
Basement
```

FIRE

2 Heat Detector Activated

If either of the heat detectors in the kitchen reaches an alarm threshold a Stage 1 Verification Time of (60s) is initiated. During this time if the second detector also measures a signal, or a Call Point is activated the system will go into full alarm.

During Verification (Stage 1 and 2) the sounder/beacon in the kitchen will sound and the hotel manager receives a pager message, a beacon flashes at reception and the fire doors are closed. The panel will also buzz and display 'Kitchen Verifying'.

```
    Zone 0001        VERIFYING
Basement
Kitchen                    (OPTO SMOKE   )

1 Zone In Alarm              More>
```

(60)

Stage 1

3 Alarm Acknowledgement

If a member of staff in the kitchen believes the signal is not due to a fire that requires a full evacuation they can press the AlarmCalm button.

This starts a 90s Stage 2 Verification Time.

```
    Zone 0001        VERIFYING
Basement
Kitchen                    (OPTO SMOKE   )

1 Zone In Alarm              More>
```

(90)

Stage 2

At the end of this time if the signal has cleared the system resets. If the signal remains or the fire is confirmed via the second heat detector or a Call Point (at any time) the system goes into full fire.

```
FIRE STARTED IN ZONE 0001
Basement
Kitchen                    (OPTO SMOKE   )

[    1 Zone in Fire.          Zone 0001]
Basement
```

FIRE

4 Common Area

The Dining Room is considered a common area and no Verification is allowed. If a detector receives a signal or a call point is pressed the system goes into full Fire.

```
FIRE STARTED IN ZONE 0001
Basement
Kitchen                    (OPTO SMOKE   )

[    1 Zone in Fire.          Zone 0001]
Basement
```

FIRE

5 Coincidence Detection

Users can set the Max Building Areas in Verification (e.g. 5) and if a sixth anywhere on the site goes into Verification a full Alarm condition will be immediately sounded.

Meeting rooms

Kitchen

Dining room   Bedroom

Theatre

```
FIRE STARTED IN ZONE 0001
Basement
Kitchen                    ( OPTO SMOKE   )

[    1 Zone in Fire.        Zone 0001]
Basement
```

FIRE
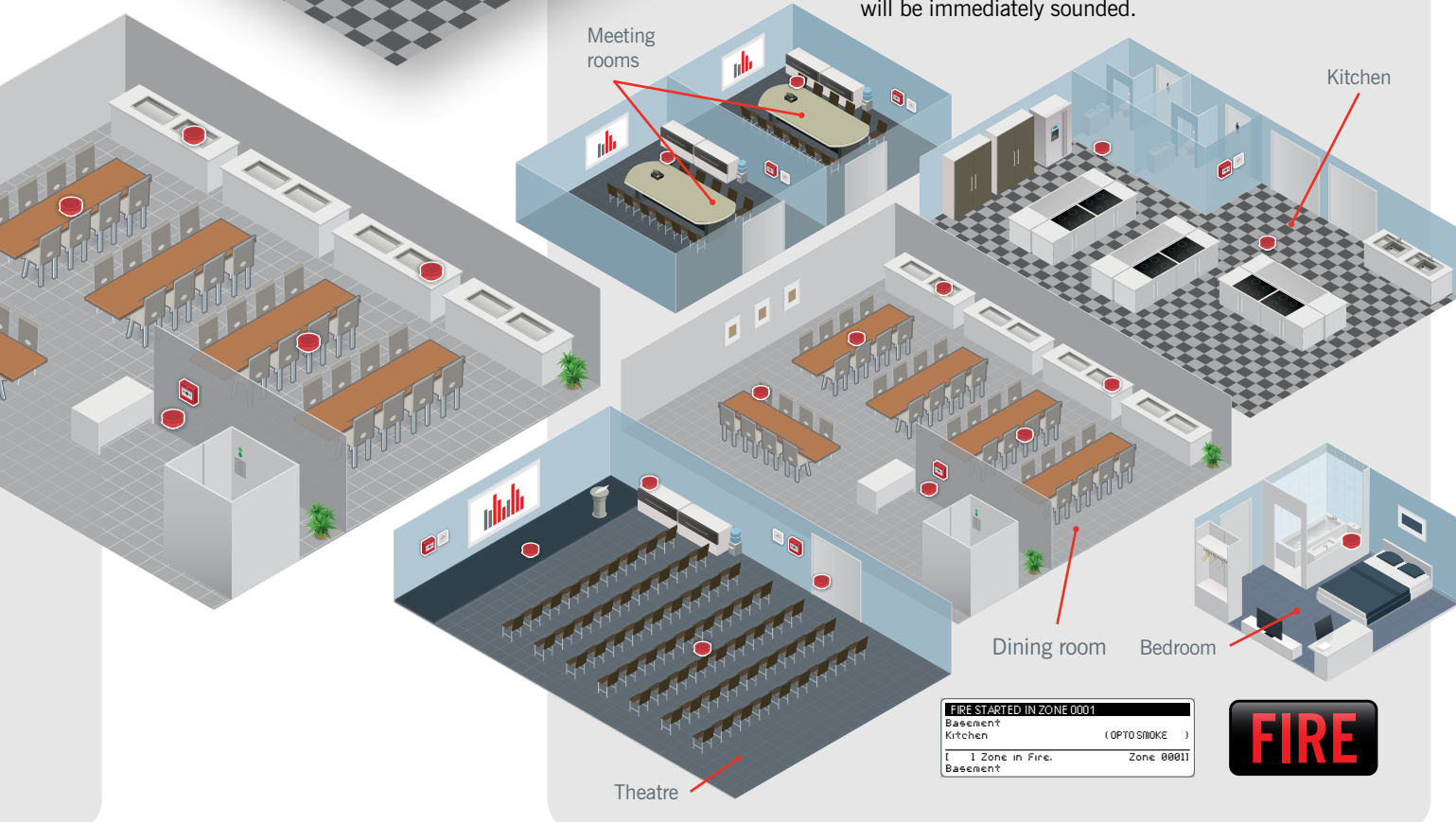
AlarmCalm

Example of Use in Hotel Receptions

The reception floor is classed as a common area so no verification is allowed.

MxPro 5 / Axis EN Panel

Call Point

LifeLine Radio Paging Panel

Beacon

Optical Smoke Detector
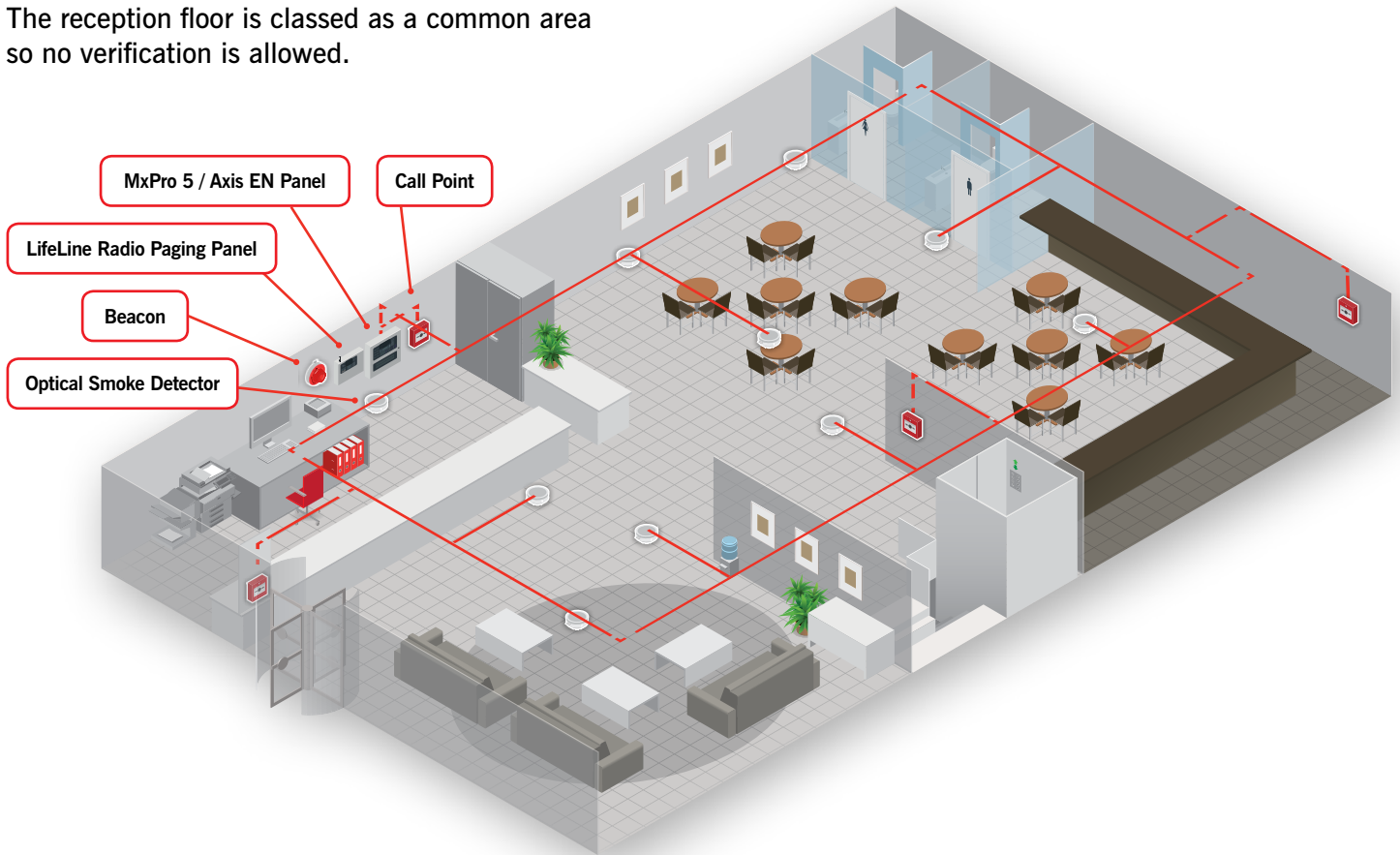
AlarmCalm

AlarmCalm is a very powerful tool that allows the automatic false alarm strategy for any building or site to be easily configured.

Much more information is available on the AlarmCalm website, **http://alarmcalm.advancedco.com.**

Upgrade your Software

AlarmCalm requires software and firmware upgrades, which are available to download now via our online support portal, Advanced360. You can also get online tech support, book demos, book training and much more, all for free.

Register now at http://360.advancedco.com

Advanced

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