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Cross Zoning is a false alarm reduction feature you can assign to almost any zone on the system.

# **Understanding Cross Zoning**

### Introduction

One of the major concerns facing the security industry today is the high incidence of false alarms. To combat this problem, DMP has developed and incorporated many false alarm reduction features into its command processor panels and accessory devices. Included among these features is Cross Zoning where one or more zones can send alarms *only* when two faults have occurred within a specified time.

One of the most effective false alarm reduction features, cross zoning can be used with any zones within a single partition. You can cross zone a PIR with itself, two different PIRs, a door and a PIR, or any combination of burglary protection devices to best protect the premises. Cross zoning is not restricted to any one area so it provides tremendous flexibility when laying out a system.

Cross Zoning, along with Fire Verification, Transmit Delay, Exit Error, and other powerful false alarm reduction features, allows DMP panels to offer you increased opportunities for sales based on the ability to provide unmatched false alarm protection at a very low cost.

## **How Cross Zoning Works**

Setting up zones for cross zoning is easily done during the panel's initial programming. As the installer is selecting the characteristics for the zone, such as swinger bypass, prewarning at the keypad, and restorals, he also selects cross zoning and a cross zone time between the range of 4 to 250 seconds. This is the time frame that all cross zoned devices in the system will follow. Both of these options must be programmed before cross zoning can operate.

Once the system has been fully programmed and restored to an operating state, cross zoned devices will work in tandem with all other cross zoned devices within the same partition.

#### **Cross Zone Alarms**

When the system is armed and a cross zoned device is tripped, the panel **immediately sounds the alarm bell or siren**, if it has been programmed to do so. In addition, the cross zone time (between 4 and 250 seconds) previously programmed by the installer begins to count down. During this time the panel delays sending any alarm report to the central station until the first device restores and trips again or another cross zoned device within the same partition trips.

If no other device trips and the cross zone time expires, the panel immediately sends a fault report for the device that tripped.

If the first device does restore and trip again, or another cross zoned device trips, the panel sends an alarm report for both devices.

To send an alarm report, either the first device must trip a second time, or another cross zoned device must trip.

Both trips must occur within the time programmed by the installer. This time can be from 4 to 250 seconds.

## **Cross Zoning Applications**

There are hundreds of unique applications for cross zoning but we can probably group them all into just two main categories, Residential and Commercial.

#### **Residential Applications**

Residential security systems have specific requirements that can affect the way in which cross zoning is used. Perhaps the most important of these is that most residential customers stay at home during the night. Along with the fact that a good portion of residential customers are home during the day, the obvious question raised is, "How can cross zoning be used in a system where the interior protection is usually turned off?".

There are actually two answers to this. First, the customer leaves the home empty at some time; and this is where an opportunity exists for cross zoning to protect the property while the customer is away.

Second, not all of the interior *has* to be left off at night. Most DMP panels provide Area or Home/Sleep/Away arming that can allow you to actually divide the interior of a home into two or more separate areas!

Users can then leave disarmed those areas they might need to access at some time during the night, for example the upstairs sleeping areas. The entire downstairs, interior and exterior, could be armed with full cross zoning to give the maximum level of security to the home.

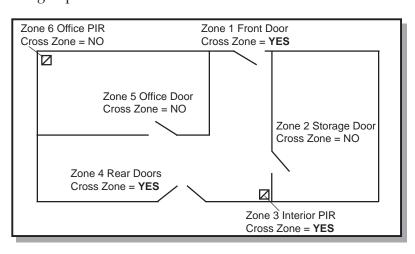
#### **Commercial Applications**

Cross zoning has tremendous potential for commercial applications mainly because it can be used on burglary and 24-hour panic and auxiliary zones. Below is a typical commercial building floorplan and its use of cross zoning to protect the office entries.

In this diagram, a small commercial building's interior PIR and two exterior doors have been programmed for Cross Zoning. Should an intruder break through the front or back door, a local alarm will sound.

If the intruder then enters the premises far enough to fault the PIR covering the corridor, an alarm report will be sent to the central station.

However, if either door's contacts are faulted due to wind shaking the door or wiring problems, the local alarm will sound but only a zone fault report will be sent to the central station.



Cross zoning can be used effectively in multi-suite buildings or those that require protection devices placed in close proximity to each other. The real promise of cross zoning, however, is in its ability to reduce the incidence of false alarms caused by changes in the environment in which the protection devices are installed.