



Perimeter Security Detection
Course Time: 1 Hour

Course Description

Perimeter detection requires knowing not only what devices to use but how best manage their placement to maximize the effect while maintaining affordability. This course is the first in the perimeter detection series. It defines perimeter detection, identifies the key devices and walks through the basic strategy for deploying a system in both residential and commercial applications.

After completing this module, you should be able to:

- Comprehend the physical barriers that constitute a building perimeter
- Understand the role of intrusion detection systems in protecting these perimeter barriers
- Acquire knowledge of perimeter sensor technology
- Discover the advantages and limitations of each type of perimeter sensor technology
- Learn to choose the right combination of technologies for a particular building type and end-user application

Course Outline

- Introduction
- Learning Objectives
- Defining the Building Perimeter
- The Concept of Defense in Depth
 - Layers of Electronic Security
 - Layer 1 – Perimeter Protection
 - Layer 2 – Interior Protection
 - Layer 3 – Spot Detection
- Applied Exercise – Knowledge Check
- History of Perimeter Alarms
 - A.R. Pope's Burglar Alarm System
- The Importance of Supervised Closed Circuit Alarms
 - Closed Circuit Essentials
- Types of Sensors
 - Photo Electric Beams
 - Proximity Sensors
 - Motion Sensors
 - Vibration and Shock Sensors
- Wired vs. Wireless Technology
- Applied Exercise – Knowledge Check
- Perimeter Sensor Technologies – Pros and Cons
 - False Positives and False Negatives
 - Photoelectric Beams
 - Technology
 - Aligning Photoelectric Beams
 - Pros and Cons
 - Inertial Vibration Sensors
 - Technology
 - Pros and Cons
 - Contact Shock Sensors
 - Technology
 - Pros and Cons
 - Volumetric/Non-contact Shock Sensors
 - Technology
 - Pros and Cons
 - Proximity Switches (Magnetic Contacts)
 - Technology
 - Pros and Cons
 - Motion Detection
 - Technology
 - Pros and Cons
 - Applied Exercise – Perimeter Sensors Mini Exam
- Applying Sensor Technology to Building Perimeters
 - Building Types
 - Residential Structures
 - Standalone Commercial
 - Multi-unit Commercial Shared Occupancy
 - Perimeter Vulnerabilities

- Doors
 - Garage Door
 - Windows
- Applied Exercise – Which sensor(s) are best in these scenarios?
- Conclusion