

## Electronic Security in Daily Life

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In the rapidly changing age of automation, the importance of electronic security is growing exponentially. As society develops, it becomes necessary to have a means of keeping and delivering important data securely. Electronic security began from communication security for military purposes and has been expanded and developed to computer security, network security, and information security. The primary function of electronic security is to protect property, equipment, lives, and information against threats and criminals.

An example of an electronic security system is the Internet. The Internet, developed in the 1960s was a major breakthrough in the world, and has caused a tremendous global impact and had a decisive impact on the expansion of electronic security. The Internet is a widespread and dense network that leads to the connection of PCs around the world. It is a core infrastructure of our society and economy. However, the problem is that the Internet is not fully secure. As time goes on, hackers attacking the Internet have diversified. Some of them do research to make the Internet safer, but others are malicious hackers who make a criminal profit. They are also called blacker hackers or crackers.

These malicious hackers attack the Internet with various purposes and means. There are curiosity, criminal, and espionage attacks. These attacks cause enormous damage not only to individuals but also to communities, and there is a serious problem in that it is relatively easy to learn and there are too many tools available to them. This is because hackers can obtain a tool through their community that can be used without difficulty even if they do not know the operation principle.

Malicious code and DDoS (Distributed Denial of Service Attacks) are the typical methods used by hackers. Luckily, there are several methods we can use to protect our PC. We need to install a trusted anti-virus program and keep it updated, and do not download software or programs from unknown sites. In addition, we also

should install a firewall which is a system designed to prevent unauthorized access to or from a private network.

As electronic technology advances, electronic security systems have become more reliable, secure, and smarter. This is especially true of residential security technology. Modern adjustments to security technology provide home owners with more access and flexibility with their systems. Whether we are at home or not, we can protect and control our property remotely. Using the monitoring application or pressing a button through the app in our smartphone, we can control the entire security system in the house. It can also be monitored 24/7 by a security company who will respond by alerting local authorities about prospective emergencies. Thanks to the simplification of the home security system, an expert is no longer need to install the system, and any homeowner can simply install a security unit and quickly control the unit from home or away.

Electronic security is not only used for residential security systems but also broadly used in the industrial, medical, and commercial industries. These security systems mainly consist of access controls, surveillance cameras, alarm systems, detectors, and sensors. The access control system is one of the main factors of the security system. It provides secure access to a facility or another system for authorized personnel only. In the modern electronic access control system, a PIN credential, a smart card or a biometric feature uses as a standard key which is very difficult to duplicate. Surveillance cameras are used in almost all organizations for the purpose of observing an area to monitor and control. Besides its main purpose, it can reduce potential crimes because they are less likely to commit a crime in a monitoring area. The alarm system is designed to give an alert when an interruption or unauthorized entry into a protected area or facility occurs. The alarm system can apply to different types such as a fire alarm, burglar alarm, and an emergency alarm in conjunction with sensors or detectors.

The electronic security system means an electronic device or a set of devices that operates to provide a desired protection and it plays a significant role in keeping us safe every day from the potential crimes. The main purpose of electronic security systems is to minimize security threats as much as possible. Potential security threats cannot be completely avoided in real world, however, as technology continues to develop, electronic security systems become more reliable and precise.

In addition, the cost of the electronic security system is steadily decreasing, it will become more universal and accessible for everyone to use. As technology developed, the threat to the Internet grows. In order to protect the Internet, we need to know how to prevent the malicious code and DDoS. The development of the electronic security system makes protecting our property, and community safer. It also makes our lives reliable, and secure. The importance of electronic security systems will grow, and there is no doubt that it will keep our society safer.