

Closed Circuit Television (CCTV) - An Introduction

CCTV has proven to be an effective and versatile tool in helping to combat criminal activity and other anti-social behaviour.

It achieves this by a combination of:

- Deterrence.
- Detection/response.
- Provision of evidence.

In their early days, CCTV systems were fairly expensive to install and maintain, and as a result were mainly confined to a few town/shopping centres and very large industrial sites. Ongoing development led to significant reductions in cost and much improved reliability and this, coupled with widespread recognition by central and local government of their effectiveness, has led to such systems becoming commonplace in public areas. CCTV systems have in effect come of age and the general business community can now realistically consider some form of CCTV system as part of their overall security arrangements.

What is a CCTV System?

In simple terms it is an electronic system for the capture of photographic images, and the transmission of these to another location for viewing and/or recording.

The most basic system will consist of a camera and a television screen, but most will also include a video recorder. While in some situations this type of system may act as a general deterrent, unless it is being watched continuously it can only provide recorded evidence of previous events.

If a CCTV system is to play an effective role in 'out of hours' security, it will usually be necessary for the system to be activated by some form of detector and then be connected to a manned monitoring post/centre. Monitoring can be undertaken from a control post or security lodge, (e.g., as part of a large site, or from many miles away, for example at a specialist remote monitoring centre).

Monitoring of CCTV systems allows security guards/operators to view events as they occur, and then arrange an appropriate response.

CCTV pictures are transmitted locally by means of various types of cable, or sometimes microwave transmission. Transmission to a remote monitoring centre is usually achieved by utilising an ISDN telephone line.

Common Applications for CCTV

The uses to which CCTV equipment can be put are many. Listed below are just a few of the security related applications:

Access Control

- Visual confirmation of persons seeking entry to buildings or other defined areas.
- Monitoring access to car parks or private roads.

Monitoring Safety

- Of public areas.
- Of staff working in vulnerable occupations and/or locations.
- Of customers.

Controlling Theft, Arson and Vandalism

By monitoring:

- Shoplifters.
- Cash handling positions.
- Bank vaults or similar high security areas.
- Unmanned areas such as warehouses, goods loading bays and yards.
- Covertly or overtly the activities of employees.
- Premises and yards outside normal business hours.
- Conventional intruder alarm system activation, and recording and/or transmitting visual evidence of the cause of the alarm.

What type of system do you require?

The type of system required can only be determined following careful analysis of the nature of the problems faced or anticipated.

In general, the effectiveness of any CCTV system will be more dependent on good design and competent system operation, than the size and complexity of it.

Who should install CCTV systems?

The work should be entrusted to reputable and experienced installers, preferably those whose work is subject to independent inspection.

Key Action Steps

- Evaluate the extent and type of problem, (e.g., safety, theft, vandalism or arson).
- Carry out a risk assessment; identifying weaknesses and target areas, and considering whether other measures will be needed to complement CCTV, (e.g., better physical security, or an intruder alarm).
- Consider the environmental factors, such as type of area, location of cameras and potential access to the equipment.
- Consider the competence of the system operators, and the need for training.
- Inform staff and other interested parties, (e.g., tenants) of your intentions.
- Inform your insurers, and seek their advice. This is particularly important if you wish the CCTV system to replace or complement any existing security measures, (e.g., manned guarding).
- Consult only competent recognized installers.

Useful Contacts

Canadian Alarm and Security Association
National Office
610 Alden Road Suite 100
Markham ON L3R 9Z1
(905) 513-0622
Toll Free 1-800-538-9919

Other References

Other Aviva Hardfacts Numbers:
A-5599 - Closed Circuit Television (CCTV) Systems - Guidelines for Purchasers.
A-5600 - Closed Circuit Television (CCTV) Systems - Glossary of Terms.