

## Surveillance Cameras and Home Security

A security camera system or CCTV (Closed-Circuit Television) provides access to information otherwise unavailable to you and to law enforcement officials when your home or business has been invaded. Most people do not consider CCTV necessary to a good home security system. But your normal magnetic sensors and motion detectors only alert you and others at the moment of invasion.

CCTV's are primarily designed to record an invasion of privacy and to assist the police catching the offender. But, while their primary focus is recording criminal activity, security cameras operate as a powerful criminal deterrent. Intruders are less likely to approach an area scanned by a camera because, not only is their motion being detected, but more importantly, their identity is being detected and possibly recorded.

### Considerations Before Purchasing

When considering a CCTV, you must remember that the primary purpose of a security camera system is documentation. Because of what it is used for, you want to consider what the camera has to offer in order of sensitivity, resolution, and features.

Consider first the light sensitivity. Sensitivity is the amount of light supplied to the camera. This guarantees the quality of the image that the camera will supply.

After sensitivity, you will need to think of resolution. Resolution deals directly with the quality of a detailed image. Basically, resolution determines the clearness of the image. Sensitivity manages the light which allows the image to be seen or unseen. Resolution allows the image to be identifiable.

Lastly, you must consider the various features of the system. This includes recording capability, motion detection, pan/tilt, zoom, etc. These are important in defining the area and the image you want. They must be carefully considered with regard to your security needs.

### Basic Package

The three components for a basic CCTV package are the cameras, the cable, and the monitor. All other components or features (motion activation, panning, additional lenses, amplifiers, etc) are peripheral to the actual system. The camera transmits a visual image to the monitor through the cable. It is that simple.

### Advanced Accessories

A recorder may be the most crucial add-on to your CCTV. Since the fundamental function of the camera is documentation, nothing is more important than having that evidence of intrusion when you need it.

While a conventional VCR may suffice, A DVR (Digital Video Recorder) is the better way to go with CCTV recorders. DVR's offer more hours of recording time than VCR's. They also are able to record onto your PC and have many features that guarantee more options not available to a VCR. Some of these features include viewing recordings or live visualizations

online while you are away from your PC or monitor, contact by phone or email when a motion detector is activated, and quicker and easier copying of images to CD, email, or printers.

#### Other Surveillance Accessories

- Housings & Brackets (covers or brackets for placing and protecting the camera body)
- Pan/Tilt Unit (a unit attached to a mount that pans or tilts the camera)
- Pan/Tilt Controller (a control panel that allows you to pan or tilt the camera)
- Switcher (switches the visual between cameras or monitors)
- Lenses (changes focus)
- Transmitter or Receiver (transmits or receives video signals via cables, phone line, radio waves, light waves, etc.)
- Amplifier (creates stronger or bigger waves for long distance).
- Infrared Illuminators (infrared lamps that allow clearer visuals for night vision).
- RF / Digital Modulator (changes the CCTV frequencies to an normal RF frequency).
- Quad Processor (allows more than one camera visual to appear on one screen).
- Power Supply Panels (creates one power unit for all the cameras and monitors in the system)

### Camera Placement

Whether placing your camera indoors or outdoors you want to get a clear vision of what is happening and who is intruding. In order to achieve this, you will need to spend time maneuvering your camera to give you the information you need with the clearest image possible.

The environment will play a huge roll in how and where you install your system. Most interior cameras can be easily set to run as soon as you place them. Focusing your lenses or wiring (if you do not install a wireless system) might be the most difficult part of installing an interior security camera. An exterior camera is another story. Finding an area that will provide proper lighting is very difficult outdoors because light is constantly changing.

Placing the camera in the area you want and getting the image you want may take a lot of adjustment, but it can be done. Patience is the key.

### Exterior Lighting

The first thing to look for in an exterior camera is the camera's lux. Lux measures the amount of light needed to produce a clear image. You want to find a camera that requires little or no lighting. You want a camera with lux as close to 0 as possible. When dealing with cameras that require so little light, you should be able to provide enough light either by yard lights or by infrared illuminators. You may also provide lighting by altering the camera's shutter speed.

When placing the exterior cameras, you want to keep in mind the information you want to receive. Basically, you want to be able to identify any intruder. For this you will want to place the camera where it can easily and clearly get a view of the intruder's face. Some

suggest that you ought to have the camera at head level. Be careful. At that level, it is easily tampered with and headlights will easily render the camera useless.

With additional ground lighting, such as lights or infrared illuminators, you want to position the lighting in such a way that it will angle the light or infrared rays off the intruder into the lenses.

## **Weather / Vandals**

Weather and vandals are two exterior forces that may quickly render a camera completely useless and irreparable. To avoid these problems, it is advisable to buy housing that will protect the camera.

Most cameras are said to be water resistant. Do not let this fool you. Water resistant only means that it will resist to a certain point a light drizzle. A heavy rain will quickly destroy a camera. You will want to buy a housing for the camera that will protect the camera against rain and water in general, and at the same time keep the line of vision clear.

Depending on the level of crime in your area (check with local law enforcement), you may want to protect your camera with a specially designed housing. Some of these housings will protect against .22 caliber bullets or a direct hit from a baseball bat.

## **Legal Considerations**

It is advisable to check local, state, and laws concerning surveillance before placing your security cameras. Cameras are not allowed to intrude on the privacy of others.

Nor is it legal in most areas to record conversations. While it is possible to buy a camera with a microphone or to have the microphone attached, recording the conversation is generally considered illegal.

## **Implementing Surveillance**

Let our security specialists help you find the perfect customized surveillance package for your needs. Call us at 524-4454 / 524-4279 / 524-4465 / 536-7449. Or visit our [website](#) and see what we have to offer you.