

# LAS VEGAS METROPOLITAN POLICE DEPARTMENT



## *FOCUS: Home Protection*

### *“Tips for the Purchase, Installation and Maintenance of CCTV Recording Systems”*

**Ever improving and consumer friendly technology has expanded home protection options for many homeowners.** People seem to be looking for more ways to protect their home in their absence, or, to be able to view activity on and in their property any time they choose to. The idea of “nanny cams” has evolved into everyday viewing ability for many homeowners. For some, it is peace of mind that they can take a peek into their home while they are at work, away on vacation or out for the day. People feel a sense of reassurance when they can confirm that there have been no breeches at their home, and they feel better knowing that if there is a breach, they have the ability to observe and report while something may be happening. Whether a homeowner chooses self-monitoring, or contracts with a security company providing monitoring and response, the choices are plentiful. It is important to have an idea of what the technology offers and the best fit for your needs. Surveillance systems vary in type, quality and usefulness. This tip sheet provides some information that may be helpful.

- 1. Selecting a Digital Video Recorder (DVR) is as important as the cameras. There are two main types of Digital Video Recorders: PC-based DVR’s and Standalone DVR’s.**

**PC based DVRs** are built around a PC running on the Windows operating system. PC based DVR’s are easier to use, more feature-rich, and usually cost more than standalone DVR's. You can add more cameras to a PC-based DVR at a later time by adding additional video capture cards or extension cards.

**Standalone DVRs** run on Linux operating systems that are designed to run a single application. Standalone DVRs are not as feature-rich as PC based DVRs but they are more cost-effective. The Standalone DVR’s software provides live view, remote access, camera control and other basic administrative functions.

- 2. The three most common record options available on most CCTV DVR’s are recording based on motion detection, alarm contacts or scheduled record.**

**Motion detection recording** is where the DVR detects motion by comparing current picture with previous picture and if there is a change it will start to record. **If DVR supports motion detection, then it will have some form of option to adjust sensitivity.** **Alarm Contacts recording** is when an external alarm is

triggered. Some examples of external alarms are door contacts or perimeter sensors. **Schedule recording** is recording at specific times of the day or all day.

3. **CCTV security cameras produce images using CMOS or CCD chips.** Tiny and very low price CCTV cameras usually use CMOS technology and produce poor quality video.

**Look for CCD technology cameras for better quality video.** Minimum camera resolution should be 640 x 480 in order to provide facial recognition. The higher the resolution number, the sharper the image will be. Megapixel IP cameras can capture High Definition Video and provide greater detail, improving identification, but are more expensive.

4. **Basic setup problems reduce the performance of many CCTV surveillance systems.**

**DVR setup is important to get the best image detail.** Recording for longer periods of time reduces the quality of the video. Setting the DVR to record for 2 weeks or less will provide more detail than recording for several weeks.

**Provide adequate lighting** to capture images in both day and night. Make a point of fixing outside cameras so that they do not look towards the sun.

**Outside cameras** should be out of reach and visible as they make for a good deterrent to crime. Use outdoor cameras to watch your entrances and you can use the excess viewing area to watch the perimeter of your home.

Place your **front door camera** in a corner facing away from the home. This allows you to see the face of the person standing at your door, and will likely also allow you to see part of your front lawn or walkway leading to your door.

Place the **backdoor camera** close enough to the door to see detail, but far enough away that you can also watch part of the yard for safety reasons. This usually means about 10-12 feet away from the door. **Any cameras that are watching entrances** should be placed on the side of the door that opens in order to see the person entering or exiting and so the door does not block the view

5. **Since DVRs are constantly running, it is a good idea to know a few basic maintenance tips to keep it working efficiently.**

Try to keep your DVR in a **well ventilated area** with a bit of air flow. DVRs tend to collect a lot of dust and can clog the system and hamper your DVR's ability to work correctly. Use a can of compressed air and **clean your DVR** out every month or so. **A good preventative measure to protect your DVR is to make sure and connect it to a power surge device** which will help prevent an unwanted power surge from overloading and frying your DVR's circuitry. Lastly, make **sure camera lenses and enclosures are cleaned regularly.**

*(This information is a guideline. Seek industry information for further.)*