Manuals

Recording Resolutions and Quality

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When it comes to overall quality of an analog security camera system, there are a few different variables that you want to look at. Recording resolution, frame rate, image sensor, and the TVL of your cameras(and whether they are focused or not) all make up the overall quality of your image.

There are four main recording resolutions in the world of analog security systems. Those resolutions are:

960H: 960x480

D1: 720x480

HD1: 720x240

CIF: 260x240

The higher the resolution is, the better image quality that is going to be saved to the DVR's hard drive. With the better image quality, you will have a better chance at identifying an individual.

When it comes to frame rates, most of our DVRs are rated for 30FPS at CIF resolution per channel. 30 frames per second is comparable to a normal television video feed.

Most of our DVRs are capable of recording at least D1 and lower, however there are some trade offs when using a higher resolution. On most of our systems, when using D1, your framerate is cut by at least half. Most of the time, your frame rate is cut by even more than half! This means that while the resolution of your video will be clearer, you are only getting a percentage of what is happening. Some extremely fast movements may not be noticeable with the lower framerate.

A DVR listed as Realtime Full D1 can record at D1 resolution and 30FPS. Some DVRs

will be marketed as Full D1, but because it doesn't say "realtime", it is not going to be able to record at 30 FPS per channel.

There are multiple sizes and types of image sensors. The larger the image sensor is, the better it should reproduce color. This means that a 1/4 inch image sensor is not as good as a 1/3 inch image sensor. As far as types go, there are CCD and CMOS. Typically speaking, a CCD image sensor is better than a CMOS image sensor.

The last part of the quality equation is TVL or better known as TV Lines. TV Lines are a measure of horizontal resolution. The lines of resolution are too small to be able to be seen with the human eye. One has to use a special chart to be able to count the lines of resolution.

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Author: Alex Crewell
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