

# CCTV Generic Terminology

**Real Time:** In PAL format real time is established at 25 Frames or Images Per Second (FPS). For large object sites such as truck stops the FPS can be dropped very low to reduce HDD usage. The FPS are flexible and most machines these days will allow the user to pick the FPS required on a per camera basis rather than machine wide.

**Resolution DVR:** Measured in CIF (Common Image Format) is the approximate size of the on screen image. CIF is approximately one quarter of an A4 sheet. 2 CIF is half, Full CIF or D1 is approximately A4. The bigger the on screen images the less pixilation you will get when zooming into a recorded image.

**Resolution Camera:** Measured in TV lines the bigger the number of TV lines the better the detail in the images recorded.

**Sensitivity:** A cameras ability to reproduce a given scene with a given light. Usually expressed in LUX (Candle light). Unobstructed sun is 100,000 LUX or the equivalent of 100,000 candles. A full moon is 0.2 LUX or the equivalent of 0.2 of a candle. Therefore if you have a camera that operates on a LUX level of 0.3, 4, 5 or higher that camera should give you a good image in as little light as full moonlight. Please see our Lux Chart for more accurate figures.

**WDR (Wide Dynamic Range):** Helps get detailed information from the dark part of the image without saturation from the bright part of the image. The higher the number, the better the WDR. The standard now is approximately 128. The LUX is often referred to in camera specification as "Min Illumination".

**Day & Night:** Day & Night refers to a function which helps the camera adapt to low light conditions. In low light the camera switches to monochrome automatically, allowing for much greater light sensitivity. For extreme low light scenes additional IR (Infra Red) illumination may be required. Cameras can be purchased with IR LED's or separate IR illuminators can be purchased.

**Automatic White Balance:** Accurate Colour Reproduction requires that the camera compensate for the colour temperature of the light source. Most white balance is automatic but some sites may require a camera that has manual white balancing due to a specific type of lights or surfaces.

**Motion Detection:** This is a common function on most DVR machines these days. The DVR will only save recorded images when motion has been detected in those scenes. This reduces HDD usage and also makes searching for particular events much easier.

**Privacy Masking:** This feature allows for certain areas in the picture to be masked so they are either not recorded or not viewed at all.

**PTZ (Pan Tilt & Zoom) Cameras:** Most cameras are fixed in either a traditional full body housing or a dome housing. There are also cameras which can move and are operator controlled or follow pre programmed routes or tours, and can also move when motion is detected. The latest technology for the PTZ is "Auto Tracking". This feature will automatically Pan, Tilt & Zoom to follow and identify a subject clearly.

**IVA (Intelligent Video Analytics):** Motion detection is the most common and easy to understand IVA. I am sure you have heard of "Facial Recognition" cameras? Or number plate cameras? These use an IVA to create a response to a certain set of parameters easily configured on the DVR software. Examples of IVA are Trip Wire (over a certain line creates an alarm), Direction of motion (vehicles or pedestrians travelling in a certain direction only or an alarm is generated), Object left behind (most common in airports and then shopping centres (a bag or similar left in one spot for over a certain client dictated time will generate an alarm), Object Removed (used in art galleries mainly, should an object not be in an image that was previously there an alarm will be generated. One organisation uses this for fire extinguisher thefts on motorways.

This information and more will soon be on our website. In the meantime if you wish to compare Lens Field of View with distance views please visit <http://www.supercircuits.com/resources/tools/fov-comparison-tool>

