

CCD (Charged Coupled Device)

Charged Coupled Device. This is a solid state semiconductor imaging device often referred to as an integrated circuit, chip or "imager" solid state cameras are sometimes referred to as CCD cameras.

Sensitivity

A camera's ability to reproduce a given scene with a given amount of light. Usually expressed in foot candles or lux. The sensitivity of a CCD camera, broadly speaking, is a measure of its performance in low light conditions.

LIGHTING	LUX LEVEL
Unobstructed sun	100,000
Sun with light cloud	70,000
Sun with heavy cloud	20,000
Home / office lighting	100-1000
Sunrise / sunset	500
Street lighting	1-10
Twilight	4
Full moon	0.2
Quarter moon	0.02
Overcast moon	0.007
Clear night sky	0.001
Average starlight	0.0007
Overcast night sky	0.00005

WDR (Wide Dynamic Range)

Wide Dynamic Range (WDR) technology helps to get detailed information from the dark part of the image without saturation from the bright part. There is no limitation of zone area with the WDR function and the color image is crisper than when using traditional BLC functions. It combines two fields which are high shutter speed exposure in bright areas and low shutter speed exposure in dark areas into one composite image.

Pixel

Short for Picture Element. A pixel is the smallest area of a television picture capable of being delineated by an electrical signal passed through the system.

The number of picture elements (pixels) in a complete picture, and their geometric characteristics of vertical height and horizontal width, provide information on the total amount of detail which the raster can display and on the sharpness of the detail, respectively.

Day & Night

Day & Night refers to a function which helps the camera adapt to low lighting conditions. In low light, it switches the camera from color to monochrome automatically, allowing for much greater light sensitivity.

ICR (Infrared Cutoff Removal)

The IR cut filter is on when the camera is operating as a color camera for precise color reproduction. With ICR, the filter is removed which allows for much greater light sensitivity in monochrome mode.

BLC (Back Light Compensation)

In CCTV applications it is common to have a bright light source behind the subject of interest. A person at an ATM or entering through an outside door are common examples. Without compensation, these subjects would normally appear as dark silhouettes. The aim of backlight compensation technology is to allow the camera to find the best picture conditions and automatically give the necessary light level compensation, so that users can obtain good identification of a subject in the foreground when there is a bright light source in the background. BLC works by enhancing specific zones in the picture which usually contains the subject of interest. WDR is a more effective alternative to BLC that does not depend on the subject being in a specific zone.

HLC (Highlight Compensation Capability)

HLC (Highlight Compensation) is Samsung Techwin's unique BLC technology that detects if any strong spots of light exist and compensates for the area as needed to produce clearer images. Spotlight BLC is especially effective for reading the number-plates of cars in streets or parking lots at night.

Automatic White Balance

Accurate color reproduction requires that the camera compensate for the color temperature of the light source. Automatic white balance is a feature that the camera uses to do color compensation. For indoor applications incandescent,

fluorescent, and quartz lighting all have different color temperatures. Outdoors there is sunlight, mercury vapor, and low pressure sodium lighting, all of which have drastically different color temperatures. In many applications the color temperature can change as lighting conditions change. Samsung Techwin cameras offer white balance functions that can be tailored to provide superior color reproduction over a wide range of color temperature conditions.

Resolution

The ability of the camera to resolve fine detail can make the difference in obtaining evidence or not. Resolution is measured by a chart with converging lines of higher and higher density. The resolution is the line density where the camera is no longer able to reproduce individual lines. For this reason, resolution is expressed in terms of TV lines (TVL). The higher this number is, the better the picture.

MD (Motion Detection)

This is a function where the camera analyzes successive frames of video and can detect movement in the scene. Units that use MD utilize various types of thresholds that can be programmed by the user to prevent or reduce false alarms. If the type or level of motion crosses these thresholds, the unit can automatically react in a way that benefits the system. In cameras with MD, a visible alert message can appear on the screen. In some models, a contact output from the camera can be used to switch a picture to a particular monitor, calling the attention of the operator.

Privacy Masking

This function allows for areas in the picture to be masked so that they cannot be viewed or recorded. The size and position of these masks are programmable. This feature is useful in applications where a camera can see into areas that are not relevant to the security purposes for the camera and the owner does not want to be subject to privacy invasion claims.

Auto Tracking

The advanced auto tracking feature provides high-accuracy detection of moving objects in targeted area by identifying the characteristics of the subject including color, shape and contrast using advanced algorithm. This feature will

automatically pan, tilt and optically zoom to identify a subject clearly. This allows the operator easily identify and lock a subject on the screen at a push of a button.

Auto Digital Flip

The auto digital flip feature allows for more convenient way to view an objects that pass directly below the camera. As the camera pans in the vertical direction to follow the object, the digital flip feature will automatically flip the image 180° as the object passes beneath the camera, and continue to follow the subject without delay.

Smart Zoom

The advanced smart zoom feature provides a quick way to automatically pan, tilt and optically zoom in to an area where the motion is detected. This allows the operator quickly identify a subject that is in a restricted area.

Dual Power

Units with dual power accept either 24V AC or 12V DC power sources and will automatically switch to the appropriate mode upon **530TVL 580TVL** receiving power.