

**Alarming** Feature on some CCTV equipment, which allows the equipment to provide a simple switch closure (usually) in response to a designated input alarm signal.

**Aperture Opening (Lens)** Controls the amount of light reaching the surface of the camera pick-up device. Aperture size is controlled by the iris. Increasing the f-stop decreases the amount of light reaching the pick-up device.

**Aspect Ratio** Ratio of picture height to picture width. Standard ratio is 4:3.

**Automatic Brightness Control** Electronic circuitry, which automatically controls the brightness of video monitors in relation to ambient light.

**Automatic Frequency Control (AFC)** Circuitry that automatically maintains the desired frequency.

**Automatic Gain Control (AGC)** Circuitry that automatically adjust the signal to proper strength.

**Automatic Light Control** Process by which the brightness upon the camera pick-up device is automatically adjusted according to the brightness of the scene.

**Auto Pan** Automatic back and forth camera motion.

**Auto Scan** Same as Auto Pan.

**Auto Iris Lens** Camera lens, which automatically adjusts for proper light levels.

**Attenuation** A decrease in signal strength.

**Bandpass** Specific range of frequencies allowed to pass through a device.

**Bandpass Filter** Filter that passes only a specific band of frequencies.

**Bandwidth** Range of frequencies in which a specific device will properly operate.

**Blooming** Defocusing effect that occurs around bright areas of a picture when an increase in brightness occurs.

**BNC** Most commonly used video cable connector.

**Bridging** When a high impedance video line is paralleled, usually through a switch, to a source of video.

**C-Mount** Former industrial standard lens mounting format.

**Candlepower** Unit measure of incident light.

**CCD (Charged Coupled Device)** The "chip" in a solid-state camera that replaced the camera tube.

**CCTV** Closed Circuit Television.

**Coaxial Cable** Cable commonly used to transmit video signals. It consists of a metallic shield with one or more center conductors, which are isolated from each other and the shield.

**Composite Video** Video signal that contains the picture signal, and vertical and horizontal blanking and sync pulses.

**Compression** Reduction in gain at one level of a video signal with respect to the gain at another level of the same signal.

**Contrast** The range of light and dark values in a picture or the ratio of maximum and minimum brightness.

**Crosstalk** Undesired signal that interferes with a desired signal.

**CS Mount** New standard lens mounting format.

**DB (decibel)** The power ratio of two signals.

**Depth of Field** Front to back area in the camera view, which is in focus. The better the lighting, the greater the Depth of Field possible.

**DSP** Digital signal processing.

**Duplex (Multiplexer)** A multiplexer, which allows viewing of multiple "pictures" during recording.

**DVR Digital Video Recorder** Same as Time Lapses Recorder but all recording is on a computer hard drive and can be networked.

**Dwell** Length of time a video switcher holds a camera's "picture" before switching to the next camera's "picture".

**Distribution Amplifier** Device used to send a single video input signal to multiple video output devices EIA US standard, 525 TV lines and 60 fields.

**F-Number** Indicates the brightness of the image formed by the lens and controlled by the iris. A smaller f-number means a brighter image.

**F-Stop** Indicates the speed of a lens. The smaller the number, the greater the amount of light that passes through the lens, thus allowing for better low light camera performance.

**Fiber Optics** Flexible glass fibers used to conduct signals.

**Field** One of the two equal parts into which a TV frame is divided.

**Field Frequency** Number of fields transmitted per second in a TV system. The NTSC standard is 60.

**Field of View** The horizontal or vertical picture size at a given distance from a camera to the subject.

**Focal Length** The distance from the centerline of the lens to the camera pick-up device. It determines the size of the image and the angle of the field of view as seen by the camera through the lens.

**Foot Candle (FC)** Unit of measurement of the intensity of light. 1 FC = 10 lux.

**Frame** One complete TV picture.

**Gain** The amplification a system provides to a signal.

**Gen-Lock** Method used to synchronize one or more cameras by external means. Typical methods are composite video, composite sync, and horizontal or vertical sync.

**Ground** Electrical point that is common to either metal chassis, a terminal, or a ground bus.

**Homing** Process of displaying a given camera output on a given monitor.

**Horizontal Blanking** Electrical signal produced at the end of each scanning line.

**Hum** Electrical disturbance at the power supply frequency or harmonic.

**Infra Red (I.R)** Frequency of light, invisible to the human eye, used for covert surveillance and low light camera use.

**Image Intensifier** Electronic device used to provide a brighter output image than the input image.

**Impedance** Opposition to the flow of electrical current.

**Incident Light** Amount of light directly over an object.

**Insertion Loss** Signal strength lost due to the insertion of a piece of equipment in the line.

**Looping** Term used when a high impedance device is connected in parallel to a video source.

**Lux** Unit of measurement of the intensity of light. 10 lux = 1 FC.

**Matrix Switcher** Normally used in larger camera systems, this switcher allows any of the systems cameras to be routed to any of the systems monitors.

**Modulate** To vary the amplitude or frequency of a signal.

**Monochrome** Having one color. In CCTV it is Black and White.

**Multiplexer** Device, which allows the recording/playback of multiple cameras on a single time-lapse recorder with little loss of information.

**Noise** Random electrical energy or interference.

**NTSC** National Television Systems Committee. Formulated the standards with the FCC for color television in the U.S.

**Pan** Horizontal camera movement.

**Passive** Non-powered element of a system.

**Peak-to-Peak** Amplitude difference between the most positive and negative points of a signal.

**Pinhole lens** Lens with a very small front, easily concealed, for use in covert applications.

**PTZ Pan-Tilt-Zoom** System for changing the position of a camera horizontally and vertically and of changing the field of view of the lens in order to observe a different scene. Requires special equipment at the camera and a method of controlling from the viewing area.

**Quad** Device that simultaneously places the pictures from four cameras onto one video monitor.

**Resolution** Measure of the ability of a CCTV system, or one of its components, to produce detail.

**Roll** Result of the loss of vertical sync, which causes the picture on a monitor to move up or down.

**Saturation (color)** The vividness of a color, which is directly related to the amplitude of the chrominance signal.

**Scanning** Horizontal (panning) camera motion.

**Sensitivity (pickup device)** The amount of light needed for the pickup device to operate.

**Signal to Noise Ratio** Ratio between a useful signal and unwanted noise.

**Spot Filter** A small device used to increase the f-stop range of a lens.

**SVHS** High resolution video recording format. **SYNC** Electronic pulses inserted in a video signal for assembling picture information in the proper position.

**Time Lapse VCR** Video cassette recorder that can record for extended periods of time on a single videotape by using frequent tape "pausing". The longer the time of recording, the fewer number of "pictures" recorded per second.

**Vari-focal Lens** Lens with an adjustable focal length, such as 3.5-8mm, 2.6-6mm, and 4.5-10mm.

**Vertical Interval** The time of the vertical retrace.

**Vertical Retrace** Return of the electron beam to the top of a TV picture tube or a camera pickup device target at the completion of the field scan.

**Zoom Lens** A lens that is used as a wide angle, standard, or telephoto lens by varying the lens focal length.