GLOSSARY OF COMMON CCTV TERMS

APERATURE: The opening of a lens which controls the amount of light reaching the surface of the vidicon tube. The size of the aperature is controlled by the iris adjustment. By increasing the f stop number (f 1.4, f 1.8, f 1.9, f 2, f 2.8, etc.) less light is permitted to pass to the vidicon.

ASPECT RATIO: The ratio of width to height of a television picture; four units wide by three units high in standard TV systems.

BRIGHTNESS: A monitor adjustment which varies the overall brightness of the televised picture.

CATHODE RAY TUBE: The picture tube in a video monitor which reproduces the picture image seen by the camera.

CONTRAST: The brightness difference within a televised subject. Low contrast is shown as mainly shades of gray, while high contrast is usually distinct blacks and whites with very little gray. Also, a monitor adjustment which increases or decreases the level of contrast of the televised picture.

DEPTH OF FIELD: The front to back zone in a field of view which is in focus in the televised scene. With a greater depth of field, more of the scene, near to far, is in focus. Increasing the f stop number increases the depth of field of a TV lens. Therefore the lens aperature should be set at the highest f stop number usable with the available lighting. The better the lighting, the greater depth of field possible.

FIELD OF VIEW: The area that can be seen by the camera.

FOCAL LENGTH: The distance from the center of the lens to a plane at which point a sharp image will be produced of an object at an infinite distance from the camera. The focal length determines the size of the image and the angle of the field of view seen by the camera through the lens. Lenses are grouped by focal length expressed in millimeters (mm). Therefore, a 25 mm lens is a standard lens for a 1" vidicon tube; a 12.5 mm lens is a wide angle lens and 50 mm and above lenses are considered telephoto lenses.

PAN: Movement of the camera in a horizontal direction.

RF OPERATION: Using the camera with the output switch in the RF position so that a picture will be obtained on a home type television receiver. The RF output signal contains radio-frequency impulses similar to those transmitted by a broadcast television station.

RANDOM INTERLACE: A simple scanning technique commonly used in CCTV systems in which there is no external control over the scanning process.

RASTER: The rectangular pattern of scanning lines upon which the picture is produced. The illuminated face of the monitor.

RESOLUTION: A measure of the ability of a television system to reproduce detail. Resolution is limited by the lowest rated component (camera or monitor) in the TV system chain.

SCANNING: The rapid movement of the electron beam in the vidicon tube or cathode ray tube in a line-for-line manner across the photo-sensitive surface which produces or reproduces the video picture.

SIGNAL-TO-NOISE RATIO: The ratio between useful TV signal and interference or noise. The higher the ratio, the better the picture clarity. Noise is a spotty or grainy texture in the picture.

TILT: Movement of a camera vertically.

VIDICON BURN: The retention of an image on the vidicon which shows on the monitor after the camera has been removed.

ZOOM LENS: A lens system that may be effectively used as a wide angle, standard, or telephoto lens; a variable focal length lens.