

Lenses - How Do I Choose?

THE TYPE OF LENS that will be used will depend on the view required and where the camera is positioned. It is helpful to know what lens you will need before installing the job. One easy way to accomplish this is with the use of hand held viewfinder. When this is not available, a lens calculator is a good alternative that can help you take the angle and distance to help determine the proper lens for the job.

Types Of Lenses

- **Fixed Focus w/o Iris -** Most basic lens without any adjustments.
- **Manual Iris -** Manual iris to adjust camera for max. depth of field in fixed lighting situations.
- **Auto Iris**
 - Video -* Takes a video signal reference from the camera and video level is controlled via controls on lens.
 - Galvo DC Drive -* Takes a reference DC voltage from the camera to open or close the iris. Control is an integral part of camera.
- **C and CS Lenses**
 - CCTV lenses are available in two different lens mounts.
 - C Mount -* Lenses have a flange back distance of 17.5mm
 - CS Mount -* Lenses have a flange back distance of 12.5mm
C mount lenses can be used on CS mount cameras by utilizing a 5mm adaptor or adjusting the camera for C mount lenses on cameras with a C-CS flange.
- **Peak/Average -** Is a control which affects the degree the auto iris takes account of any bright areas in the picture.
- **Focal length and what is seen -**
 - Wide Angle -* Small focal length approximately 60 degrees.
 - Normal -* Medium focal length approximately 30 degrees. (see's what you would see with your eye).
 - Telephoto -* Long focal length approximately 15 degrees or less.

ANGLE OF VIEW CHART

Pickup Device	2.8mm	3.5mm	4.0mm	4.8mm	6.0mm	8.0mm	12.0mm	12.5mm	16.0mm	25.0mm	50.0mm	75.0mm
1/4"	64°	51°	48°	40°	34°	25°	15°	14°	11°	7°	4°	2°
1/3"	80°	68°	62°	53°	44°	33°	20°	19°	15°	10°	5°	3°
1/2"	97°	84°	76°	66°	55°	43°	30°	28°	22°	14°	7°	5°