

How To:

CALCULATE YOUR CCTV LENS REQUIREMENT



We have a tip available 162 which gives a view guide for lens choices. If you're wanting to do an exact calculation you can use the following formula:

$$f = c \times \frac{d}{w}$$

- f = lens size needed (mm)
- c = chip width (mm)
1/3" CCD = 4.8mm, 1/4" CCD = 3.2mm
- d = distance of object from camera (m)
- w = width of view required (m)



Example Calculation:



We want our CCTV camera to show just the centre car so we can identify the number plate.

- Our camera chip is 1/3" CCD or **4.8mm**
- The camera is **4.45m** away from the car
- Our target, the car, is 1.78m wide

$$f = c \times \frac{d}{w}$$

$$f = 4.8 \times \frac{4.45}{1.78}$$

$$f = 12$$

So the lens that we require would be 12mm.

Please Note

These "Technical Tips" help sheets aim to answer commonly asked questions in a concise and informative manner - they are for advice & guidance only and do not replace any of the manuals or other literature supplied with our products.

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