

# CAMERAS

Y3K's range of CCTV cameras are ideal for all types of premises. This flow chart has been produced in order to answer some of the many questions which are commonly asked when specifying CCTV cameras.

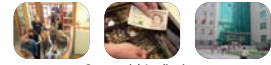
## How to choose the right CCTV Camera for your application



Domestic Applications

### Purpose

Start by asking yourself the following important questions:



Commercial Applications

**1** What size of area will the camera be looking at?

**2** What level of detail is required?

By answering these questions you can then decide on the following specifics and choose the right camera for your application.

### Lens Type



The smaller the lens size, the wider the camera view. The larger the lens size, the narrower the view. ie. 3.6mm lens = wide angle; 12mm lens = narrow angle.



The wider the angle the smaller objects will appear. The narrower the angle, the bigger objects will appear. It is very important that the correct lens size is chosen, for example having a very high resolution camera with a very wide angle of view to read a car number plate will not work, since such a wide view means the physical size of the number plate on the image is far too small to decipher.

### Picture Format



OR



CCTV cameras can provide 2 different types of images, B/W and Colour. B/W cameras are far more sensitive to light and are therefore ideal for use in dark areas or at night. Colour cameras need good lighting to provide good quality colour images, and colour images contain far more information for evidence purposes.

It is now possible to get the best of both options by using Day/Night cameras, these produce B/W images in low light conditions and colour in good lighting, they are also available with built in Infra Red LEDs, these allow the camera to see in complete darkness when in B/W mode.

### Camera Visibility



**Overt/Deterrent** styles of CCTV cameras usually are bigger and have a visual presence in the environment. This type of design is a great deterrent against opportunist crime.

See **Traditional/Box, Long Range Cameras & Speed Domes**



**Covert/Hidden** styles of camera tend to be very small or disguised as another object (ie. smoke alarm). These type of cameras are designed to detect crime taking place.

See **Mini & Covert Cameras**



**Discreet** styles of CCTV cameras have a contemporary design and are usually small to medium in size. They are the perfect mix of Overt and Hidden cameras, they offer unintrusive surveillance for domestic and commercial applications.

See **Bullet and Dome Cameras**

### Picture Quality

TVL (Television Lines) are the number of horizontal lines produced by a camera and are a measure of picture resolution or sharpness. The higher the TVL, the better the image quality the camera will provide.



Hi Resolution Image  
Typically, more than  
420 TVL

Consider the following:

What sort of image quality do I need for the purpose of this camera? Does the purpose require a good image or a general overview of the environment? Is it required for evidential purposes?



Low Resolution Image  
Typically, 420 TVL  
or less

**The higher your requirements the higher the resolution you need.**

## Approximate Horizontal angles of view for our Cameras

SENSOR SIZE	FOCAL LENGTH OF LENS (mm)																	
	2.8/3.2	3.3	3.6/3.7	3.8/3.9	4.0	5.0	6.0	8.0	9.0	11.0	12.0	22.0	38.0	50.0	85.5	88.0	126.0	
1/6"	-	-	50°	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1/4"	-	-	60°	60°	50°	-	33°	27°	-	-	-	-	-	-	2°	1°	0.5°	-
1/3"	92°	90°	78°	71°	64°	49°	43°	35°	30°	26°	23°	12°	10°	6°	-	-	-	-

## Connection/Cabling Guide

CCTV cameras can be wired in many different ways, the most popular way is by running a low voltage power cable and video signal cable to each camera from the recording or monitor location.

However in the mid 90's a new way of wiring called Plug & Play was introduced, this type of wiring is designed for simple installation by anyone with basic DIY knowledge, in a Plug & Play system a single cable will carry the video signal, audio signal (if present) and power from the camera to the recording/monitoring location. Then to power the cameras a multi camera power supply is used.

### An example of how to install a Plug & Play CCTV system:

- 1 **Locate your cameras** Up to 16 cameras depending on DVR model chosen
- 2 **Run cables from your cameras back to your DVR**
- 3 **Connect centralised camera power supply**
- 4 **Connect the camera cables to your DVR**
- 5 **Connect leads from your DVR to your TV or PC monitor**
- 6 **Power up your Cameras, DVR and TV/Monitor**

