

## See the IR light

Use a TV remote control and a digital camera to observe IR

### You will need....

- ✓ A digital camera or camcorder
- ✓ A TV remote

### Background:

Using simple everyday items infra-red radiation (IR) can be detected and observed.

### Follow these steps:

1. View the transmission LED of a TV remote with a digital camera or even take a photograph as shown below.

### So what happened?

The human eye cannot detect infra-red radiation. The charge-coupled device (CCD) in digital cameras and in camcorders can detect and display it.

### What next?

1. Point the TV remote at a mirror, detect the reflected beam, what can you say about angle of incidence and angle of reflection?
2. Try the experiment with different devices such as camera-phone.
3. Try the experiment with other IR sources such as car remote keys, the IR on a phone.
4. Why do you think the beam flickers?
5. What other forms of the Electromagnetic Spectrum can we not see?

