

WORKING PRINCIPLE OF VIDEO CAMERA

Dr. Sunil Dipak Ghodke
Assistant professor
Department of Media Studies
Mahatma Gandhi Central University,
Motihari, Bihar - 845401
Email – snlghodke74@gmail.com

INTRODUCTION

- ❖ Camera is an electronic device which helps to capture moving and still images on any storage device.



Types of Video Camera (Technically)

- ❖ Analogue Camera
- ❖ Digital Camera

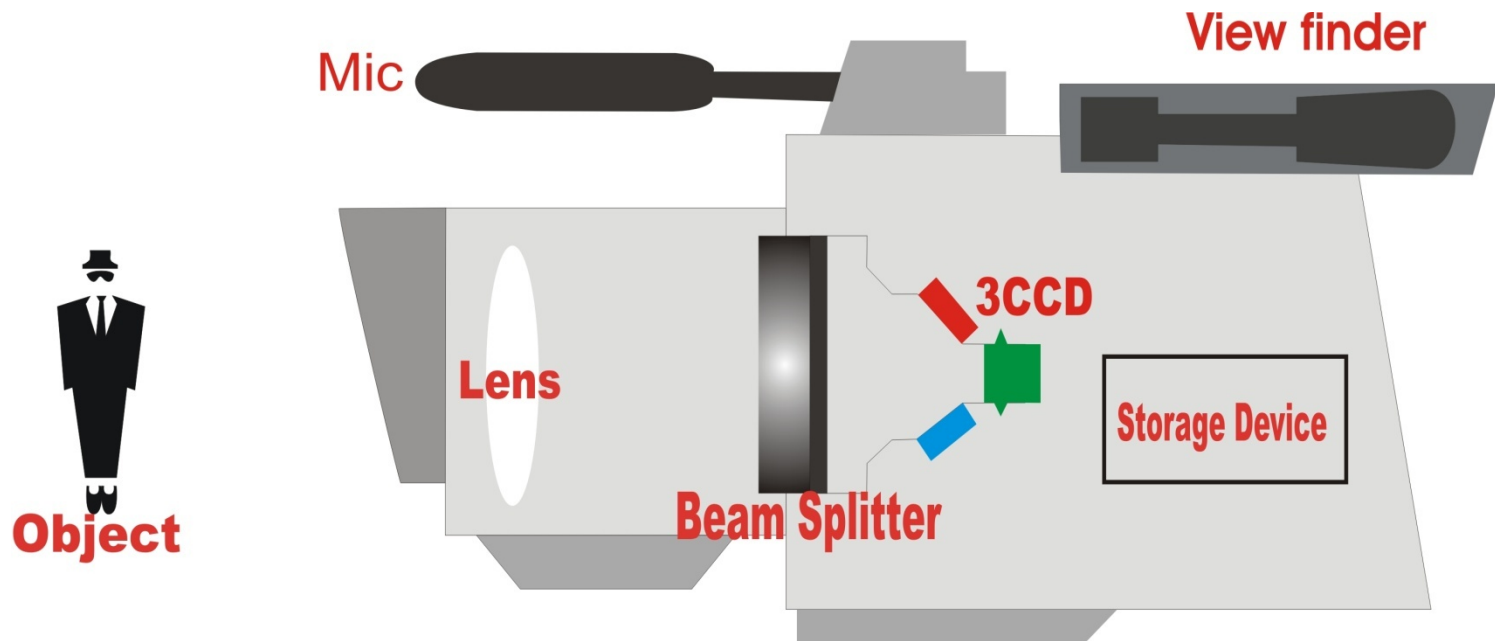
Types of Video Camera (As per use)

- ❖ Studio Camera
- ❖ Field Camera
- ❖ Prosumer Camera
- ❖ Sting Camera
- ❖ Drown Camera
- ❖ Infrared Camera
- ❖ DSLR Camera
- ❖ Spider Camera

INTERNAL PARTS OF CAMERA

- ❖ Lens
- ❖ Aperture
- ❖ Beam Splitter
- ❖ Imaging Device (CCD)
- ❖ View Finder
- ❖ Storage Device

GRAPHICAL REPRESENTATION



LENS

- ❖ It is a glass medium which gives proper direction to light rays.
- ❖ It determines what camera can see.
- ❖ It selects a certain field of view and produces a small optical image of object.



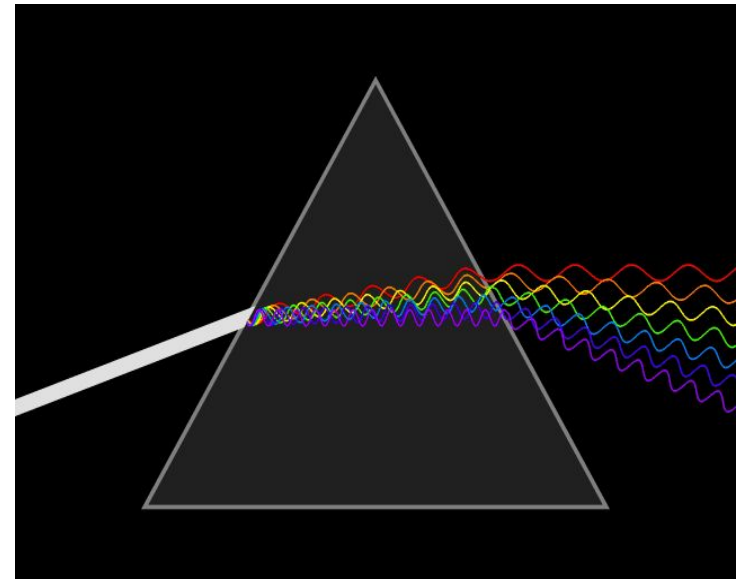
APERTURE

- ❖ Controls the amount of light
- ❖ Decide the depth of field
- ❖ Measure through F-stop Number



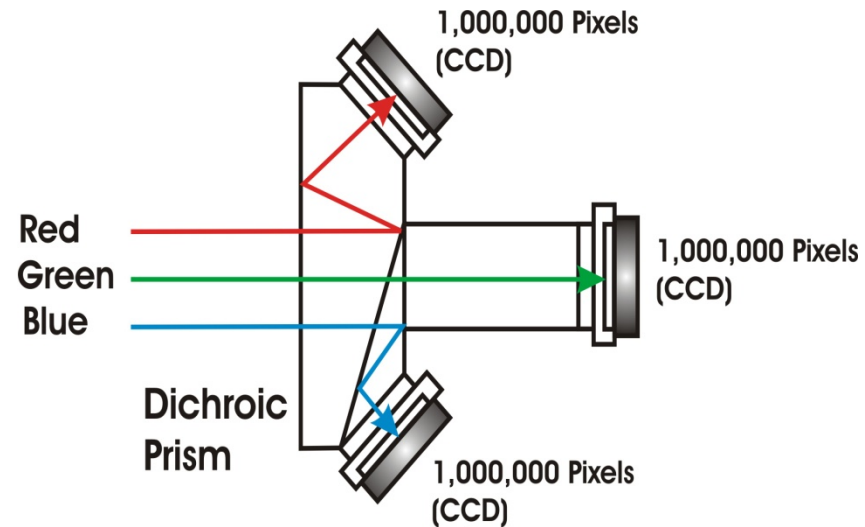
BEAM SPLITTER

- ❖ It contains various prism and filter.
- ❖ Prisms break up incident light into seven colours.
- ❖ Filters separate the white light into three primary colours namely Red, Green and Blue.



IMAGING DEVICE

- ❖ It is a transducer which converts light energy into electronic signals.
- ❖ It contains millions of image sensing elements called pixels.
- ❖ CCD and CMOS are widely used as imaging devices.



VIEW FINDER

- ❖ There are two types of View Finder.
 - Monochrome
 - Colour display (LCD)
- ❖ It presents the image what our camera lens see.
- ❖ Size varies according to their usage.



STORAGE DEVICES

❖ Various Types of Storage Device

- 8mm DVC-PRO cassette

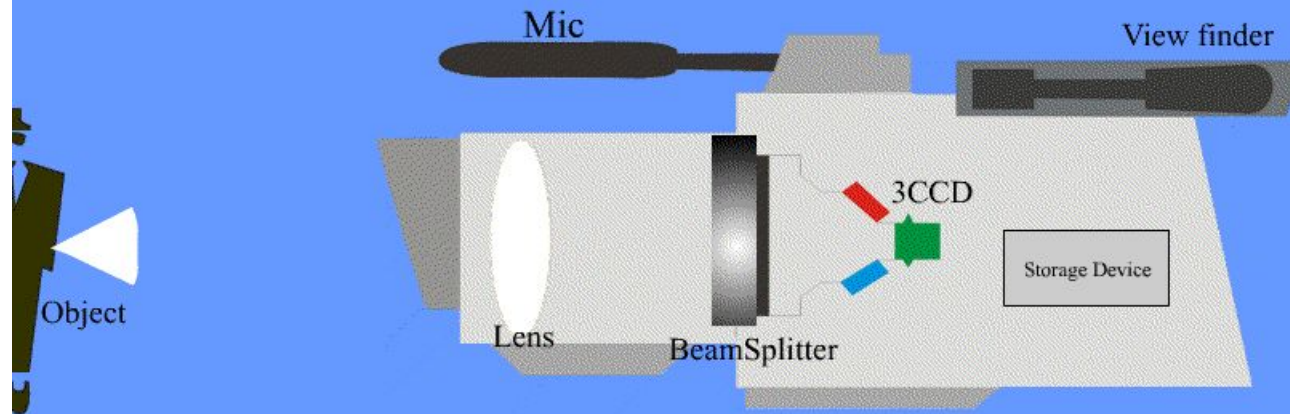
- 1/2" Beta –SP tape format

- Memory stick

- CD Rom



WORKING OF VIDEO CAMERA



EXTERNAL PARTS OF CAMERA





THANKS