

Chapter 8 Camcorder



Distributed Algorithms
for Image and Video Processing

Introduction

Quality evaluation of camcorders
or
Decision criteria to buy a camcorder

2

Image and Video Processing
Chapter 8 - Camcorder

Dr. Stephan Kopf
Praktische Informatik IV

UNIVERSITY OF
MANNHEIM

Features

- Price (200 € - 2,500 €)
- Video quality
- Video resolution (PAL, HD)
- Technical features
- Audio quality
- Appearance (color, size)

3

Image and Video Processing
Chapter 8 - Camcorder

Dr. Stephan Kopf
Praktische Informatik IV

UNIVERSITY OF
MANNHEIM

Video quality

- Light sensitivity
→ noise, incorrect colors, blurring
 - Image sharpness (quality of autofocus)
 - Visible details
 - Image stabilizer
- impossible to evaluate it on your own
(evaluation with several users required)

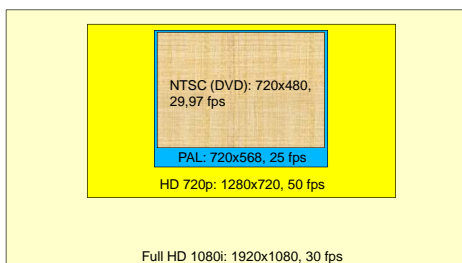
4

Image and Video Processing
Chapter 8 - Camcorder

Dr. Stephan Kopf
Praktische Informatik IV

UNIVERSITY OF
MANNHEIM

Video Resolution



- Equipment at home: HDTV, Blue Ray Player + Recorder
- Price: PAL (200-500 €), HD: 250-2,000 €

5

Image and Video Processing
Chapter 8 - Camcorder

Dr. Stephan Kopf
Praktische Informatik IV

UNIVERSITY OF
MANNHEIM

Technical features (I)

- Storage medium
 - Hard disk: huge capacity (up to 100 hours HD videos), noise, fast file transfer to hard disk
 - Memory card: large capacity, silent, energy efficiency, size of medium is small, fast file transfer to hard disk
 - Tape: low capacity (max. 60 minutes), medium noise
 - Disk: very low capacity, load noise, directly usable as DVD

6

Image and Video Processing
Chapter 8 - Camcorder

Dr. Stephan Kopf
Praktische Informatik IV

UNIVERSITY OF
MANNHEIM

Technical features (II)

- Battery capacity (between 1–3 hours)
- Support to take camera like pictures (delay until picture is taken)
- Support of external microphones (small size of camcorders → low audio quality)
- Size of display
- Weight and size of camcorder
- Software support (e.g. video editing, DVD creation)

7

Image and Video Processing
Chapter 8 - Camcorder

Dr. Stephan Kopf
Praktische Informatik IV

UNIVERSITY OF
MANNHEIM

Questions ?

Video quality:
see additional material on Web

8

Image and Video Processing
Chapter 8 - Camcorder

Dr. Stephan Kopf
Praktische Informatik IV

UNIVERSITY OF
MANNHEIM