

## UO-24 White Light Optical / Digital Image Processing - Color Encoded Photography

- √ Pure optics, optical/digital combination, and digital image processing
- √ Comprehensive system
- √ Flexible configuration



White light optical/digital image processing - color encoded photography, is based on the theta modulation theory in optical information processing, Fourier transform theory, and computer-aided digital image processing technique. It combines the techniques of white light optical information processing (color photography with black/white films) and digital decoding of a color encoded image. This experiment kit is composed of color encoded photographing, optical decoding, and digital decoding systems. It covers optical information transferring, transforming, encoding, decoding, filtering, reconstructing, storing, recording, extracting, recognizing, restoring, and operating, as well

1. The mechanism of geometrical optics and imaging,
2. The characteristics of the Fourier transform of an optical system,
3. The concept of the frequency spectrum of optical information processing,
4. The physical effect of frequency filtering,
5. The principle of color imaging, and

**UO-20 White Light Optical/Digital Image Processing - Color Encoded Photography consists of:**

Items	Description	Qty
1	Optical Rail (100C m)	2
2	Carrier	10
3	Lens Holder	1
4	Plate Holder	1
5	White Screen	1
6	Multi-Aperture Plate Holder	2
7	Code Plate Holder	7
8	Tricolor Plate	3
9	Tungsten-Light Source (LLC-18A)	1
10	Color Camera with Variable Focusing	1
11	Color Monitor	1
12	Decoding Software	1
13	Filter Set	1
14	Flash Lamp	1
15	Film	5
16	Dark Bag	1
17	Film Developing Kit	3
18	Black & White Film	1
19	Lens	5
Option		
1	PC/ Laptop	1

