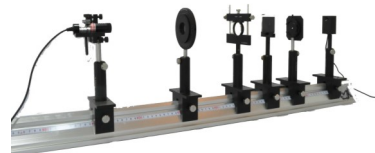


UO-21 Convolution Theorem Optical Experiment Kit

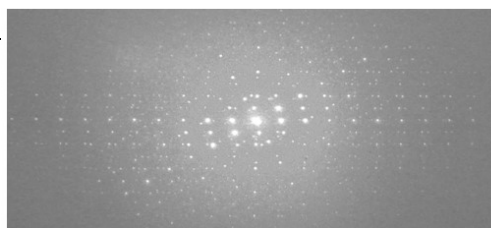
- ✓ Understand Fourier transform
- ✓ Precise measurement
- ✓ Easy operation
- ✓ Detailed instruction manual



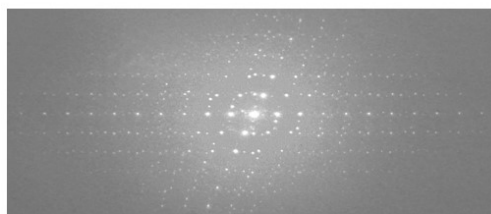
According to the convolution theorem, the Fourier transform of the product of two functions equals the convolution of the two individual Fourier transforms of the two functions. On the contrary, the Fourier transform of the convolution of two functions is the product of the two individual Fourier transforms of the two functions. This experiment kit is designed to study the convolution theorem by optical means.

UO-25 Convolution Theorem Optical Experiment Kit consists of:

Items	Description	Qty
1	Semiconductor Laser 5mw 650nm	1
2	Laser Power Supply	1
3	White Screen	1
4	Lens (f=225 mm)	1
5	Polarizer with Holder	2
6	Two-Dimensional Grating	2
7	Rail 100 cm	1
8	Carriage	5
9	Laser Holder	1
10	Filter Holder	1



(a)



(b)

Two examples of convolution results with different intersection angles of the two gratings