Pixel illuminator-C

Laser illumination on your current microscope

Supported wavelength range: 340nm - 1600nm



Features

- 1. Direct connection to camera port of microscope
- No additional attaching tool is necessary
- No user alignment is necessary

2. Laser manipulation control on GUI

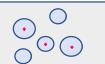
- Illumination points or illumination boundary is set by mouse clicking on the image
- 3. Data utilization and timing control with MetaMorph are available

Application

- Optogenetics, FRAP (fluorescence recovery after photobleaching)
- · Laser cell screening
- Photoporation (make hole on the cell surface)
- Laser marking



Illumination point/area selection



Point selection (manual)



Area selection (manual)



Center of bright area (auto)



Area of bright region (auto)

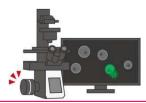


1. Standard CW

- wavelength: 405nm、450nm、488nm、514nm、532nm、640nm
- Combination of 2 wavelength is possible

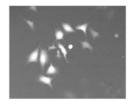
2. Non standard (please ask)

- 375nm and 561nm CW lasers are also available.
- Pulsed lasers and other CW sources can be adapt



We will change your camera to camera with laser

Demo movies





 Selected point illumination (Laser cell selection / Pulsed laser) https://vimeo.com/561212821

Selected cells are killed by laser illumination in closed chamber. Observation is fluorescent



 Selected area illumination (optogenetics / CW laser) https://vimeo.com/561213195

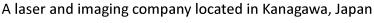
Boundary selection is set by mouse clicking on image. Laser illumination amount can be adjusted by moving speed and laser intensity



3. Object tracking

https://vimeo.com/579024209

Laser illumination with image analysis (intensity analysis) is also possible



Pinpoint Photonics, Inc.

