pE-800

8-channel LED illumination

Discover more with the most intuitive and controllable 8-channel Illumination System available

CoolLED
Simply Better Control

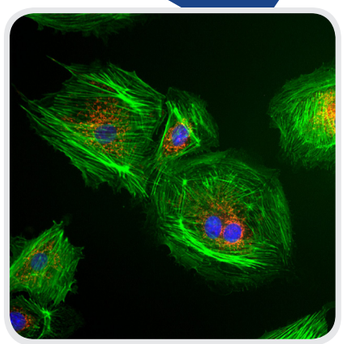
pE-800

8-channel LED illumination

Lightning Fast Microscopy

Backed by CoolLED's world-renowned support and a 36-month warranty, the pE-800 delivers the highest quality data with minimum cost of ownership and makes next generation LED illumination accessible to life science researchers worldwide.

- 8 individually controllable channels
- Broad spectrum from 365-740 nm
- <7 µs TTL triggering
- Sequence Runner
- Maximum compatibility via liquid light guide
- Software, digital & analogue control



Bovine pulmonary artery endothelial cells acquired using a pE-800

Protect your samples

Exposing samples only during acquisition protects against photobleaching and phototoxicity. Sensitive samples can be further protected by balancing the irradiance to the lowest level possible while still maintaining image quality, with fine (0.1 %) control from 0-2 %, and in 1 % increments from 2-100 %. Push the boundaries of time-lapse studies or re-create life-like cell behaviour, the more valuable a data set becomes.

Fluorescence freedom with eight channels

Eight powerful and efficient LEDs offer broad spectral coverage from 365-740 nm for use with fluorophores ranging from DAPI to Cy7. Fluorophore choice is no longer limited by the light source, even as requirements evolve over time.

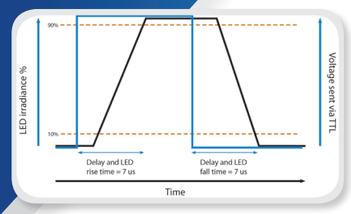
With individual channel control, selecting the optimum fluorophore combination has never been so easy – and the ability to match the LED excitation wavelengths enhances the signal-to-noise ratio for contrast-rich images revealing finer details and more information.

Capture high-speed events

pE-6501-8 USB-TTL Conversion Kit

Industry-leading <7 µs TTL triggering is a breakthrough for live cell imaging. Capturing dynamic events with the highest temporal resolution is possible thanks to precise hardware synchronisation for each channel and compatibility with the pE-6501-8 (USB-TTL Conversion Kit).

The ability to fit inline single-band excitation filters means expensive external filter wheels are no longer needed and when used alongside multi-band filters offers a low-cost approach to high-speed imaging.



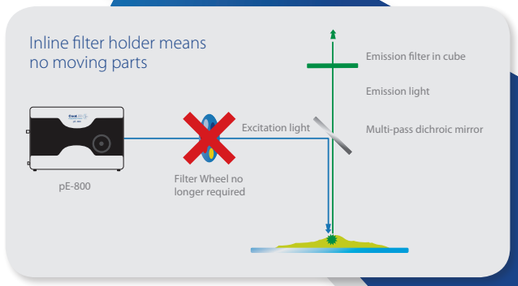
Industry-leading <7 µs TTL triggering

Sustainable illumination

The compact pE-800 Illumination System builds on award-winning CoolLED technology, with stable and reliable performance and ultra-low power consumption. The sustainability benefits go beyond energy efficiency, and by removing the need for toxic mercury, the pE-800 is a natural choice for cleaner, greener labs.

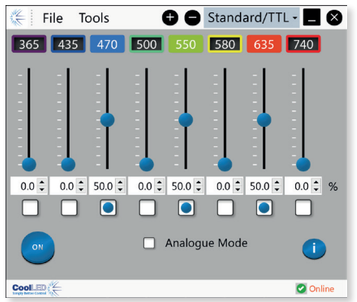
Affordable automation with Sequence Runner

The pE-800 is unique in offering the only 8-channel Sequence Runner available, enabling illumination sequences to be triggered with just a single TTL out of a camera or external hardware. When combined with inline filters, this transforms a manual microscope into an affordable and powerful eight-channel automated imaging system. As laboratory budgets become stretched, the pE-800 presents the ideal cost-effective Illumination System which makes high-end LED technology more accessible to life science researchers.



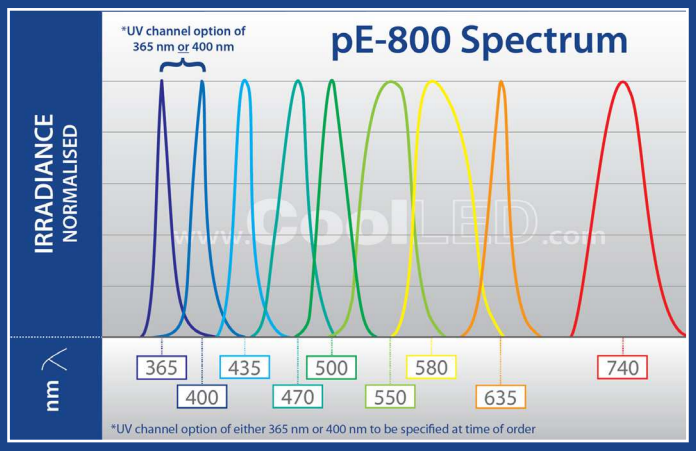
Intuitive software control

Benefit from fast USB 2.0 connectivity with full software integration in Nikon NIS Elements or the user-friendly LightBridge Graphical User Interface to control:



The LightBridge

- LED selection
- On/off
- Real time irradiance control
- Sequence Runner
- Save and load pre-sets
- pE-800 start-up settings
- Analogue settings for electrophysiology and optogenetics



Specification

Choose variant to match UV excitation requirements.
Due to a programme of continual development, please contact CoolLED (https://www.coolled.com/contact/contact-form/) for performance data

Control & Interface

TTL & analogue: 8 TTL inputs allow independent on/off control of each channel
8 analogue inputs 0-10 V, 0-50 kHz for dynamic control of irradiance from external analogue signals
Global TTL for on/off synchronisation to camera
Triggering speed <7 µs

Graphical user interface (GUi): CoolLED LightBridge GUI operates via USB to allow: On/off control; LED selection; real time irradiance control; Sequence Runner; save and load pre-sets; pE-800 start-up settings; analogue settings.

Imaging Software: Integrated into Nikon NIS Elements

Sequence Runner: Single TTL input to step through sequence defined via LightBridge or compatible imaging software (e.g. NIS Elements). Speeds <7 µs at full power.

Connectivity: USB 2 for PC connection. All other TTL and analogue inputs via BNC or SMB.

Light delivery: Light delivery via the standard 3 mm liquid light guide. An optional pE-Universal Collimator and microscope adaptor can also be selected.

To Order

pE-800-L-SB-SYS-ZZ: pE-800 Fluorescence Illumination System. SB (365 nm). For use with 3 mm Liquid Light Guide. Includes Light Source, Power Supply, Excitation Filter Holder (holds up to 8 filters), USB cable & ZZ Plug

pE-800-L-MB-SYS-ZZ: pE-800 Fluorescence Illumination System. MB (400 nm). For use with 3 mm Liquid Light Guide. Includes Light Source, Power Supply, Excitation Filter Holder (holds up to 8 filters), USB cable & ZZ Plug

To specify local power cable (ZZ): 10 = Australia, 20 = Europe, 30 = UK, 40 = USA

pE-1906: 1.5 m long, 3 mm diameter liquid light guide

pE-1908: 3 m long, 3 mm diameter liquid light guide

pE-10400-YYY: pE-Universal Collimator & customer specified adaptor

pE-CABLE-9WBNC: BNC Breakout Cable - 15 pin male connector to 9 x BNC female. Suitable for analogue or digital

pE-CABLE-9WSMB: SMB Breakout Cable - 15 pin male connector to 9 x SMB female. Suitable for analogue or digitalv

pE-6501-8: USB-TTL Conversion Kit for TTL control of pE-800 with additional BNC for other peripherals (e.g. pT-100 for transmitted light). Connects to PC via USB and is compatible with range of imaging software

pE-6501-8S: USB-TTL Conversion Kit when purchased with a pE-800 Illumination System

Warranty

Industry-leading 36 months. Read more here https://www.coolled.com/support/coolled-warranty/

Power

Power requirements: 100-240 V a.c. 50/60 Hz, 1.4 A
Power consumption: Max at 8-channel 100 % irradiance: 127 W
Standby: Max 6.4 W

Dimensions

pE-800 Light Source: 173 mm(w) x 247 mm(d) x 174 mm(h) – Weight 3.51 kg

pE-800 Power Supply: 164 mm(w) x 64 mm(d) x 35 mm(h) – Weight 0.58 kg

pE-Universal Collimator: 44 mm(w) x 86 mm(d) x 44 mm(h) – Weight 0.17 kg

Environment & Safety

LED products help laboratories become more sustainable, saving energy and reducing the carbon footprint when compared with conventional illuminators. CoolLED's products have the following benefits:

- Mercury-free and laser-free
- Energy Efficient
- Long lifetime
- No bulb replacements
- Reduced risk of eye damage
- Quiet operation
- No special disposal regulations or issues

Scan here to find us on WeChat

For more information on how CoolLED products can help you, contact us now:

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