



# pT-100 Troubleshooting Guide

### Contents

1)	The Illumination System doesn't power up (nothing appears on the Control Pod)	2
2)	No light is illuminating the sample.	
3)	The illumination appears weak	2
4)	Illumination is not flat and even at the sample (homogenous)	3
5)	Illumination is not centralized over the field of view	3
6)	Image of the LEDs on the sample.	3
7)	CoolLED contact information	3



# 1) The Illumination System doesn't power up (nothing appears on the Control Pod).

- Is the power connector fully inserted into the Control Pod?
- Is the mains lead fully inserted into the power supply?
- Is the mains supply switched on?
- Does the indicator LED on the power supply illuminate?
  - ♦ If this doesn't illuminate then there may be a fault with the power supply.

### No light is illuminating the sample.

- Confirm that the Control Pod is displaying the ON state on the screen.
- Check that the Control Pod cable is fully inserted into the D-type connector on the LED head.
- Confirm whether the LEDs are illuminating. This can be done by removing the Light Source from the scope and shining at a wall or desk (take care not to directly view the light output or shine at others). The output from the 770 nm variant of the pT-100 will be quite difficult to see, but should be distinguishable in a darkened room.
  - If the LEDs are illuminating then check the optical path of the microscope.
    Confirm that any shutters are open and that any filters are compatible.
  - ♦ If the LEDs are not illuminating then the system will need to be returned to CoolLED for investigation.

#### 3) The illumination appears weak.

- Check that the intensity settings on the Control Pod are set at an appropriate level.
- Has the optical setup procedure been carried out (shown in Section 7 of the User Manual)?
- Has the microscope been setup correctly?
  - ♦ Check that apertures are open.
  - ♦ Check for any ND filters in the optical path.



# 4) Illumination is not flat and even at the sample (homogenous).

 Has the optical setup procedure been carried out (shown in Section 7 of the User Manual)?

#### 5) Illumination is not centralized over the field of view.

- Rotate the Light Source in the port whilst observing the field of view.
  - ♦ If the offset moves with the rotation of the Light Source then the system has lost its alignment. This will need to be returned to CoolLED to be reset.
  - ♦ If the offset does not move with the rotation of the Light Source then the issue is with the optical path of the microscope. A person that is competent in microscope servicing will need to investigate this cause.

### 6) Image of the LEDs on the sample.

- Has the optical setup procedure been carried out (shown in Section 7 of the User Manual)?
- Is the pT-100 being used with any additional parts that may increase the optical path length? For example an external shutter.

## 7) CoolLED contact information

If the advice in this document has been unable to solve your issue, or the issue that you are experiencing is not listed then please contact the CoolLED support team at <a href="mailto:support@coolled.com">support@coolled.com</a>. They will be able to offer further advice and explain the repair procedure.