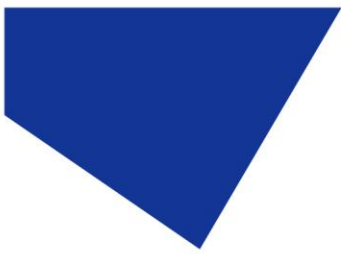


pE-300 Series Troubleshooting Guide

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

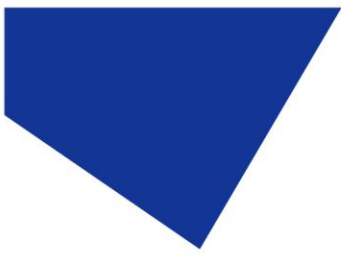
- Is the power connector fully inserted into the pE-300 Series Light Source?
- Is the mains lead fully inserted into the power supply?
- Is the mains supply switched on?
- Does the indicator LED on the power supply illuminate?
 - ◇ If this doesn't illuminate, then there may be a fault with the power supply.

2) The Control Pod display doesn't respond to button presses.

- Is the Control Pod connector fully inserted into the Light Source?
- Was the Control Pod connector inserted after power up?
 - ◇ If so, cycle the power and ensure the Control Pod is connected before power up.
- Ensure that the Control Pod connector has not sustained any damage to the pins.
- Is the Illumination System connected to imaging software via USB? Some imaging software providers disable the use of the Control Pod whilst connected to prevent any conflict of commands.

3) The sample 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 (Section 10 of the pE-300 Series User Manual)
- Has the microscope been set up correctly?
 - ◇ Check that the apertures are open.
 - ◇ Check for any ND filters in the optical path.
 - ◇ Check that an appropriate filter set is being used with the selected excitation wavelength.
- Has the sample been correctly prepared or has it suffered photobleaching?
 - ◇ Check the performance with a reference sample or calibration slide.



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

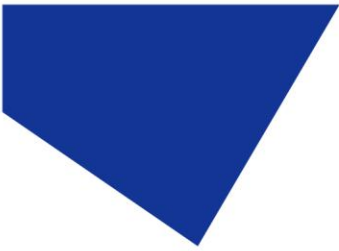
- Has the optical setup procedure been carried out (Section 10 of the pE-300 Series User Manual)?
- Is the system being used on the microscope that it was ordered for?
 - ◇ If the system has been moved to an alternative microscope, please confirm with CoolLED that the system is compatible in its current form. (Some microscopes may require a different internal optical setting, even if the physical microscope adaptor is the same).
- Are any additional components fitted to the microscope that may extend the optical path length? For example, an external shutter, filter wheel, combiner, etc.

5) Illumination is not centralised over the field of view.

- Rotate the Light Source in the epi-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 system, then the issue is with the optical path of the microscope. Please contact your local microscope servicing specialist to investigate the cause.

6) No light is illuminating the sample.

- Ensure that a wavelength is selected and in the ON state on the Control Pod. The intensity bar on the Control Pod will be filled if so.
- Confirm whether the LEDs are illuminating. This can be done by removing the system from the scope and lowering the intensity to zero. Shine at a wall or desk, taking care not to directly view the light output or shine at others, and gradually increase intensity of the relevant channel until the light is visible. Please note that most of the light output from the UV channel is not visible to the eye, it will however cause white paper to fluoresce.



- ◇ If the LEDs are illuminating, then check the optical path of the microscope.
Confirm that any shutters are open and that the filter sets are compatible with the excitation wavelengths being used.
- ◇ If the LEDs are not illuminating, then the system will need to be returned to CoolLED for investigation.

7) The Control Pod display appears blank, but functionality remains.

- Check that the brightness and contrast settings have been adjusted. This procedure is described in Section 12 of the pE-300 Series User Manual.

8) The light guide doesn't fully insert into the Light Source (light guide version only).

- Ensure that the fixing grub screw is loosened sufficiently before inserting the light guide (shown in Section 10 of the pE-300 Series User Manual).

9) The Control Pod displays 'CoolLED' and is unresponsive.

- On very rare occasions upon the application of power, the Control Pod fails to initialise fully and doesn't progress past this 'CoolLED' screen. Cycle the power to the Illumination System to re-initialise the Control Pod.

10) 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 support@cooled.com. They will be able to offer further advice and explain the repair procedure.