

Prior Scientific Help Guides and Installation Instructions

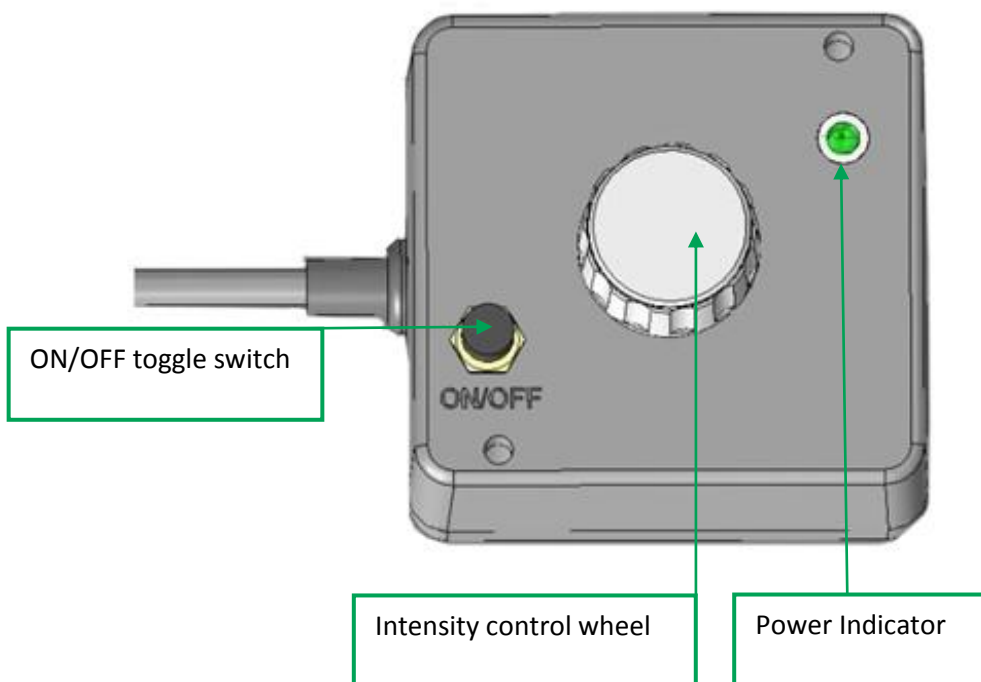
UPDATED 21 APRIL 2015

# Brightfield Connection Options

### To connect the Brightfield LED with a Prior Controller:

- 1) Connect the Intensity Control Pot to the socket on the LED Head
- 2) Connect one end of the Prior Shutter Cable on the socket on the LED Head, and the other end to any available shutter port on the back of the controller. Make a note of the shutter port used for use in any software control of the system.
- 3) Plug in and turn on the Prior Controller to give power to both the LED Head and the Intensity Control Pot.

The on/off button on the Intensity Control Pot Assembly maintains the on or off condition before and after the cycling of mains power. The Power Indicator LED will be lit if the toggle switch is in the ON position. If the mains power is on and the power indicator LED is not illuminated press the ON/OFF toggle switch. To make the control pot active use the intensity control pot to set the light levels required.

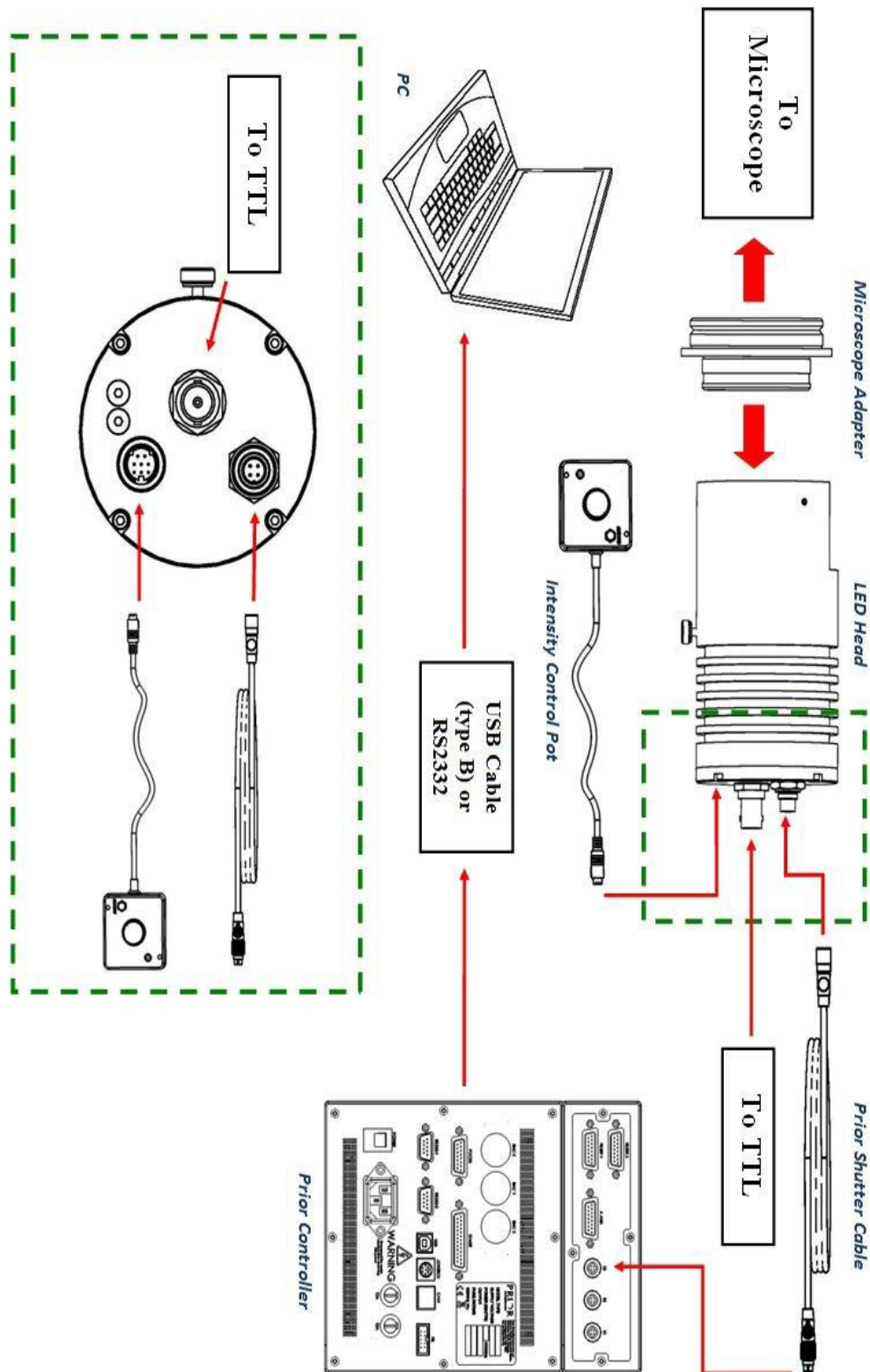


Most microscopes will require an adapter to allow the Brightfield LED to fit onto the microscope; however the Brightfield will fit Nikon Ti, 80i and 90i microscopes without the need for a microscope adapter.

## System diagram for connecting the Brightfield LED with a Prior Controller

**IT IS IMPORTANT TO CONNECT ALL DEVICES BEFORE POWERING ON THE UNIT**

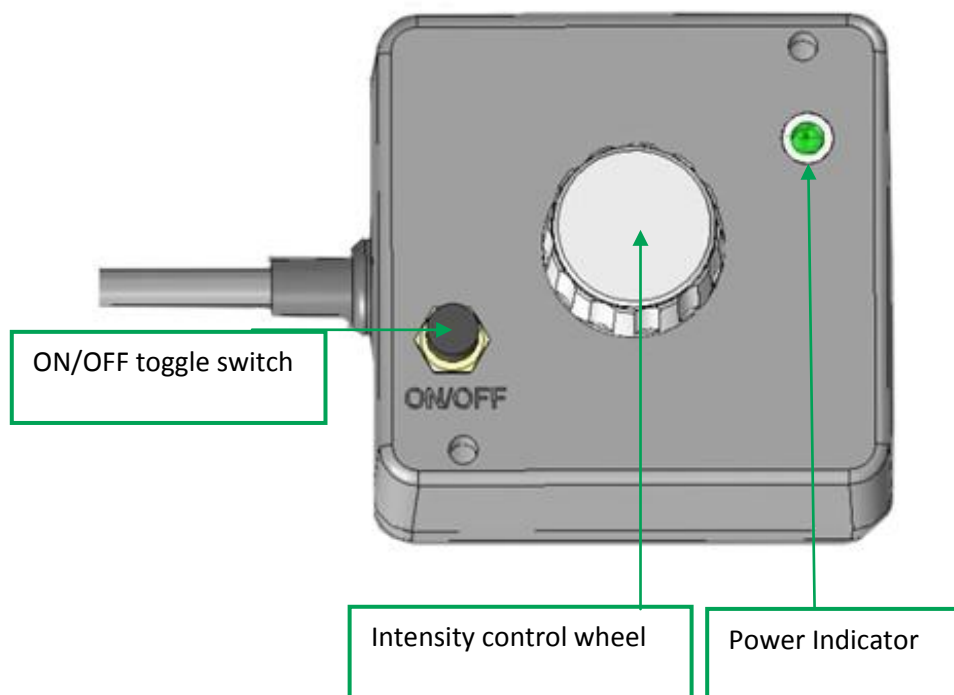
When the Brightfield LED is controlled via the Prior Controller, software control is via the shutter commands of the Prior controller. Power supply is also via the controller.



**To connect the Brightfield LED with a Prior LDBUSBTTTL Converter:**

- 1) Connect the Intensity Control Pot to the socket on the LED Head
- 2) Connect a BNC-BNC cable to the TTL port on the LED Head, and the other end to the TTL socket on the LDBUSBTTTL.
- 3) Connect the USB (Type B) cable to the LDBUSBTTTL and the other end to a free USB slot on your computer.
- 4) The LDBUSBTTTL may need to have drivers installed for it to be recognised by the PC.
- 5) Connect the Brightfield to the mains power supply. Turn on the mains switch to give power to the LED head and intensity control pot.

The on/off button on the Intensity Control Pot Assembly maintains the on or off condition before and after the cycling of mains power. The Power Indicator LED will be lit if the toggle switch is in the ON position. If the mains power is on and the power indicator LED is not illuminated press the ON/OFF toggle switch. To make the control pot active use the intensity control pot to set the light levels required.

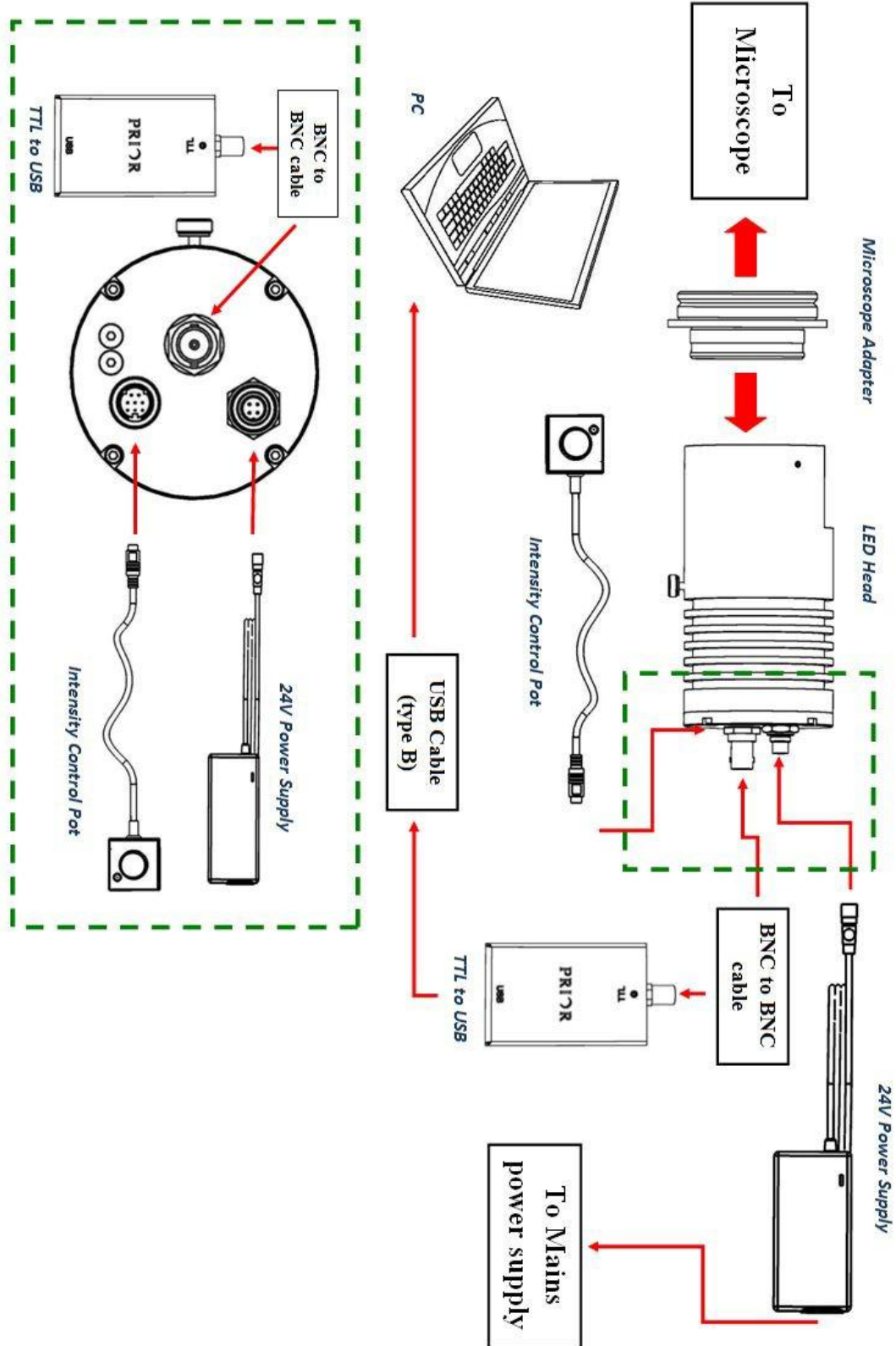


**Most microscopes will require an adapter to allow the Brightfield LED to fit onto the microscope; however the Brightfield will fit Nikon Ti, 80i and 90i microscopes without the need for a microscope adapter.**

## System diagram for connecting the Brightfield LED with a LDBUSBTTL Converter

**IT IS IMPORTANT TO CONNECT ALL DEVICES BEFORE POWERING ON THE UNIT**

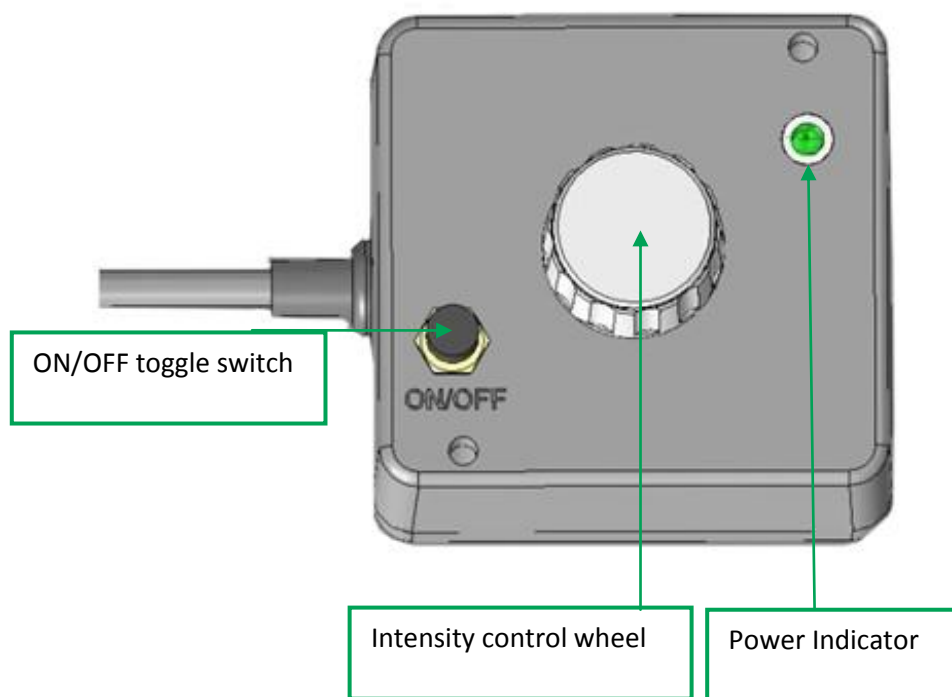
When the Brightfield LED is controlled via the LDBUSBTTL, software control is via the LDBUSBTTL. The Brightfield is powered directly from the mains.



**To connect the Brightfield LED with a Prior LDBUSBTTL Converter:**

- 1) Connect the Intensity Control Pot to the socket on the LED Head
- 2) Connect the 24 V power supply to the socket on the LED Head, and plug in the mains cable.
- 3) Turn on the mains switch to give power to the LED Head and Intensity Control Pot.
- 4) The LDBUSBTTL may need to have drivers installed for it to be recognised by the PC.
- 5) Connect the Brightfield to the mains power supply. Turn on the mains switch to give power to the LED head and intensity control pot.

The on/off button on the Intensity Control Pot Assembly maintains the on or off condition before and after the cycling of mains power. The Power Indicator LED will be lit if the toggle switch is in the ON position. If the mains power is on and the power indicator LED is not illuminated press the ON/OFF toggle switch. To make the control pot active use the intensity control pot to set the light levels required.



**Most microscopes will require an adapter to allow the Brightfield LED to fit onto the microscope; however the Brightfield will fit Nikon Ti, 80i and 90i microscopes without the need for a microscope adapter.**

## System diagram for connecting the Brightfield LED as a stand alone lightsource

**IT IS IMPORTANT TO CONNECT ALL DEVICES BEFORE POWERING ON THE UNIT**

When the Brightfield LED is controlled manually no software control is possible. The device is powered directly from the mains.

