FifeX White LED Source™

Use of Kit

The FifeX White LED Source[™] is a direct replacement for the conventional raybox source. The main advantage is that the White LED Source[™] produces significantly less heat than the raybox, making it a much safer kit to use for all ray optics experiments in the classroom.

Kit Contents

Documentation 1 x FifeX White LED Source™ 1 x 5V 1A DC power supply

Operating Instructions

- 1. Remove the FifeX White LED Source™ from the box and plug in DC power supply
- 2. Push the On/Off switch on the rear of the unit to turn the device 'on'

Experiments

The FifeX White LED Source™ can be used for classic ray optics experiments including:

- 1. Newton's Experimentum Crucis
- 2. Three parallel (or collimated) rays
- 3. Dispersing white light with a prism
- 4. Raindrop analogue

As well as these and many more ray optics experiments, the FifeX White LED Source™ can be used whenever a pure white light source is needed, for example, producing the D lines of the sodium absorption and emission spectra.

Online Support

Further information on experiments can be found at http://www.fifex.co.uk/wlsonline.htm

Safety

- 1. The FifeX White LED Source™ must only be used with the supplied regulated power supply. If this is lost or suspected damaged in any way, contact your supplier immediately.
- 2. When working in ambient light levels that are below the norm, extra caution must be taken. FifeX Ltd accepts no responsibility for damage or personal injury caused by using this product in an environment that is unsafe.
- 3. The FifeX White LED Source™ should always be turned off when not in use.
- 4. FifeX Ltd accept no responsibility for injury or damage caused by the misuse of the FifeX White LED Source™

The LED on this product is ultra bright. Extra caution must be taken. Do not look directly at a LED from close range. Do not stare at a LED source

Troubleshooting

If the White LED fails:

- Switch off DC supply immediately
 Check that the DC supply is connected correctly.
 Check that the DC supply is connected and undamaged
- 4. Switch on the DC supply
- 5. If this has not solved the problem, turn DC supply off again and contact your supplier.

Acknowledgements:

FifeX would like to acknowledge the support of Jim Jamieson (SSERC) in developing this product.