LASER POINTERS

Laser pointers have been used as presentational aids for many years by professional trainers and lecturers, with no reported incidents in the UK. Nevertheless they can still be hazardous in certain situations, ***particularly if used recklessly***.

Lasers are classified depending upon the power of their beams. Class 1 is inherently safe, whereas Class 4 is very hazardous.

The eye is the organ most vulnerable to laser damage. The human 'blink reflex' (which normally reduces exposure of the retina to ¼ second) will protect the eye from accidental laser strikes either directly into the eye or via a stray reflection. However, this only applies to laser devices up to Class 2.

Class 2 lasers have low power (less than 1mW) beams in the visible part of the electromagnetic spectrum.

Until a few years ago, laser pointers that emitted a red beam were only available. These sometimes had powers up to 5mW. Nowadays devices emitting green beams can be easily obtained. The eye is more sensitive to green light and consequently there is no need to have a beam power greater than 1mW.

Laser pointers can now be obtained via the web that can have powers up to 300mW. These may be Class 3R or 3B devices and represent a significant hazard. They must NOT be used as pointers for teaching purposes.

It is the policy of The University of Liverpool that any laser pointers used by staff and students must only be either Class1 or Class 2.

Laser pointers above Class 2 MUST NOT BE USED.

Laser pointers should only be used as a pointing device and securely stored when not in use. Persons who use laser pointers should ensure that they are aware of potential hazards and they should comply with the basic instructions below.

Instructions for use

When operating laser pointers, **ALL** users must ensure that they use them in a safe manner and do not expose themselves or others to the beam. Laser pointers are not to be modified in any way.

DO

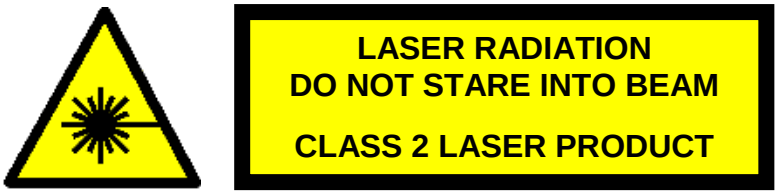
- **Follow the manufacturer's safety instructions.**
- **Take care when operating the laser pointer.**
- **Keep the 'on' button depressed only when necessary.**

DON'T

• Do not keep the 'on' button depressed when not pointing at the screen.
• Do not point at or towards the audience.
• Do not point at mirrored surfaces.
• Never look into the laser aperture.
• Never look directly or stare into the beam/beam aperture when on.
• Never allow unauthorised use, especially by children.

LABELLING

Your laser pointer must be labelled to indicate its classification. The label should look similar to the one shown below:



If your laser pointer does not have such a label, or the label indicates that it is a class greater than 2, then it must NOT be used at The University of Liverpool.

Further information can be found on Radiation Protection Office website (www.liv.ac.uk/radiation/information.htm) or from The University of Liverpool's Laser Protection Adviser (Dr. Pete Cole – 0151 794 3467).