Appendix 2 - LASER SIGNS AND LABELS

Designated Laser areas

The points of access to areas in which Class 3B or Class 4 laser products are used must be marked with warning signs complying with BS 5378 and the Health & Safety (Safety Signs and Signals) Regulations 1996. Within the University of Dundee, the following sign must be used (this sign will be supplied by Safety Services as part of the laser equipment registration process – please do not obtain it from any other source):

DESIGNATED LASER AREA CLASS

Person responsible	Unit Laser Safety Officer
Internal Tel:	Internal Tel:
Home Tel:	Home Tel:

Laser Labels

Laser labels are required for all laser products except for low power Class 1 devices. They are designed to give a warning of laser radiation, the class of laser, basic precautions and the laser's characteristics.

The laser warning uses the same triangular symbol as the door sign in an appropriate size for the laser to be labelled and should be clearly visible with any supplementary information in black text on a yellow background (examples below).

Where the size of the laser product does not permit the affixing of a reasonably sized label, a sign should be displayed in close proximity to the laser with all appropriate information on.

Class 1 (by engineering design)

For these types of laser product we specify that they are totally enclosed systems and give details of the laser enclosed. Describe them on the outside as a Class 1 laser product using the following label:

CLASS 1 LASER PRODUCT

A TOTALLY ENCLOSED LASER SYSTEM
CONTAINING A CLASS LASER

In addition each access panel or protective housing shall bear the words:-

CAUTION – CLASS ____ LASER RADIATION WHEN OPEN

with the appropriate class inserted and then followed by the hazard warning associated with that class of laser (see warning statements in following labels).

Class 1M

No hazard warning label. Explanatory label bearing the words:

LASER RADIATION
DO NOT VIEW DIRECTLY
WITH OPTICAL INSTRUMENTS
CLASS 1M LASER PRODUCT

Class 2

Label with hazard warning symbol. Explanatory label bearing the words:-



LASER RADIATION

DO NOT STARE INTO BEAM

CLASS 2 LASER PRODUCT

Class 2M

Label with hazard warning symbol. Explanatory label bearing the words:-



LASER RADIATION

DO NOT STARE INTO BEAM OR VIEW

DIRECTLY WITH OPTICAL INSTRUMENTS

CLASS 2M LASER PRODUCT

Class 3R

Label with hazard warning symbol. Explanatory label bearing the words:-

For λ 400nm-1400nm ONLY.



LASER RADIATION

AVOID DIRECT EYE EXPOSURE

CLASS 3R LASER PRODUCT

For other λ



LASER RADIATION

AVOID EXPOSURE TO BEAM

CLASS 3R LASER PRODUCT

Class 3B

Label with hazard warning symbol. Explanatory label bearing the words:-



LASER RADIATION

AVOID EXPOSURE TO BEAM

CLASS 3B LASER PRODUCT

Class 4

Label with hazard warning symbol. Explanatory label bearing the words:-



LASER RADIATION

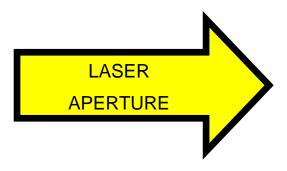
AVOID EYE OR SKIN EXPOSURE TO

DIRECT OR SCATTERED RADIATION

CLASS 4 LASER PRODUCT

Aperture Labels for Class 3R, Class 3B & Class 4 lasers

Each Class 3R, Class 3B and Class 4 laser product shall display a label close to where the beam is emitted bearing the words 'LASER APERTURE' or 'AVOID EXPOSURE - LASER RADIATION IS EMITTED FROM THIS APERTURE'. This label can take the form of an arrow if this displays more meaning:-



Radiation Output and Standards Information

All laser products, except for low power Class 1 devices, shall be described on an explanatory label with details of :-

- maximum output
- emitted wavelength
- whether laser beam is visible, invisible or both
- pulse duration (if appropriate)
- name and publication date of classification standard

LASER PRODUCT CLASS		
VISIBLE / INVISIBLE / BOTH LASER RADIATION		
Type	Medium	
PD	λ	
Maximum output		