



## **Safety Report**Innovative outdoor laser tag equipment is eye safe

Laser Tag 2 U outdoor laser tag units emit invisible, harmless infrared light, just like the infrared technology used in many household appliances. Despite the name "laser tag" there are no lasers actually used. The phrase was coined back in the 1980's following the launch of 'Star Wars' and the subsequent popularity of the sport of indoor laser tag.

Infrared Laser Diodes and Light Emitting Diodes (commonly known as LED's and IRED's) are widely used in displays, remote control systems and many toys. Instead of shining visible light, they emit invisible infrared light. LED's are basically small light bulbs that simulate a "muzzle flash" for visual effect.

## Eye safety of diode emitters

Worldwide, there is no report on eye injuries caused by incoherent diode emitters. Infrared is a non-coherent light, similar to the sort of light produced by the sun (in much more massive quantities). "Sources of non- coherent or incoherent light can be viewed safely because the light reaching the eye is only a small portion of the total output and the energy is spread over the entire retina"\*. On the other hand, it is coherent light that actual lasers produce which isn't found in nature that is a potential danger.

Remember the light emitted by Laser Tag 2 U units is non-coherent - designed to operate at safe levels and do not constitute any form of health hazard provided normal safety precautions are taken.